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Cover: Tributary of the Monocacy River, flowing along the edge of
Lily Pons, where the Limpkin was feeding on fresh water mussels.
Photo by Richard A. Rowlett

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FIRST RECORDS OF THE LIMPKIN IN THE MID-ATLANTIC STATES (MARYLAND AND VIRGINIA)

Richard A. Rowlett

Until recently, North American records of the Limpkin (*Aramus guarauna*) have been restricted primarily to Florida and extreme southern Georgia (Okefenokee Swamp). There are a few records of apparent wandering individuals as far north as South Carolina (7), and accidental occurrences in Tennessee (5), and Illinois (4). The Limpkin is non-migratory and seldom wanders from its breeding grounds. It is restricted to wooded swamps and fresh-water marshes, especially where there is an abundance of large "Ampullarian" or "Apple Snails" (*Pomacea paludosa*), which the Limpkin fonds as a favorite food item. The range of *P. paludosa* and the breeding range of the Limpkin coincide wherever they have been studied (9), and there are no records of these snails north of the Altamaha River in central Georgia (8). The Limpkin's diet, however, is not as restricted as that of the Everglade Kite, which shares the same habitat and specializes only on *P. paludosa*. The Limpkin, in Florida, also depends greatly on a fresh water mussel, *Campeoloma* sp., and on snails of the genus *Viviparus* (6). Crustaceans, frogs, lizards, worms, aquatic insects and seeds are also consumed, but to a lesser extent (9).

On May 25, 1971, I observed a Limpkin at Three Springs Fish Hatchery (Lily Pons), nine miles south of Frederick, Frederick Co., Maryland. The bird was flushed at 6 p.m. in a marshy ditch overgrown with tall weeds and tangles. It flew for 150 feet, then dropped suddenly into one of the many small drying ponds edged with cattails and other marsh vegetation. In flight it reminded me of a Short-eared Owl, with jerky wing-beats above the body. The head and neck were held erect, very much crane-like, and the long legs were left dangling. I studied the bird for 20 minutes at 40 feet, where it was standing in a non-vegetated portion of the wet pond bottom.

The bill was long and narrow, ever so slightly decurved, pale flesh in color, becoming dark brown toward the tip. The neck and head were brown, heavily streaked with narrow white streaks. The back and breast were brown with large white, elongated spots, and the belly was uniform dark brown to black. When the bird was standing, the wings when folded were very dark brown to almost black toward the tips of the primaries. In flight, the bases of the primaries were uniform brown, and the secondaries and tertaries were brown with large white spots as on the back. The legs were long, thin, thickly jointed at the knees and dark grayish-brown with toes noticeably long. While the Limpkin was in the open, it waded about in a cautious step by step limping fashion (hence the name,



Photo May 26, 1971, Paul G. DuMont. Photo May 29, 1971, Carl W. Carlson.
The Limpkin at Lily Pons, Frederick County, Maryland

Limpkin), jerking its head and neck forward and slightly to the side, and flicking its tail in much the same manner as a rail. Each time the Limpkin was flushed, it would utter a few barely audible, short, low, coarse "croaks," and would fly only short distances, never circling around aimlessly. Finally, the Limpkin flew into the edge of the adjacent woods and stayed in the small clear rocky stream during a sudden heavy rainstorm.

I observed the Limpkin on seven different dates from May 25 to June 8. The bird was never as tame as it was on the 25th, and with the continued harrassment, it would fly to the tops of nearby trees up to 60 feet above the ground.



Impoundments at the north end of Lily Pons,
where the Limpkin was most frequently seen, May 25 to June 8, 1971.

Lily Pons covers about 60 acres and has many features resembling typical Florida marshes where the Limpkin is normally fairly common. The Limpkin seemed partial to the abandoned north portion of the fish hatchery where there were many ponds filling with dense marsh vegetation and kept wet only from rain water. The banks and dikes were heavily overgrown with weeds and tangles. The bordering Monocacy River and clear rocky tributary offered ideal protection, being heavily shaded with tall Tulip-trees, Sycamores, cottonwoods, and maples, while a dense green understory prevailed.

There appears to be an excellent food source coinciding with this "unique" habitat at Lily Pons. Several large snails were found in the areas where the bird was most frequently seen. The 1 1/2 inch by 1 inch snails, identified as *Viviparus japonicus*, a cultivated species at Lily Pons, are closely related to a species of *Viviparus* in Florida, on which the Limpkin's diet is greatly dependent. Many shells were found broken in the same manner, from the aperture to about half way around the basal whorl, thus simplifying the removal of the soft bodied snail. Many were found stuck in the mud along a drainage ditch with the aperture facing up. Many others were found floating in the ditch.



These shells of the snail *Viviparus japonicus*, cultivated for commercial use, are believed to be a major food source of the Limpkin at Lily Pons. Note how each shell is embedded in the mud, broken in the same manner along the basal whorl. The flat disc-like operculum has been cast to the side.

Several shells of fresh water mussels (Unionidae) were found scattered along the shaded banks of the clear, gravel bottom tributary which feeds the Monocacy River, where the Limpkin had been seen on at least four occasions. Most of the 10 to 20 shells examined were broken along the posterior ventral portion which is the thinnest and weakest area along the edge. This type of shell breakage is typical of the habits of the Limpkin in Florida. For details of the fascinating feeding habits of the Limpkin, the reader is referred to Snyder and Snyder, 1969, pages 184-195.

Not a trace of the Limpkin could be found after June 8, and no freshly broken snail shells could be found.

Because of poor weather conditions most times the bird was seen, the photographs taken by Paul G. DuMont, Carl W. Carlson, and myself are not good. The two reproduced on page 4 have been filed with the Migratory Bird Populations Station at Laurel, Maryland. Other observers who saw the Maryland Limpkin were Virgil Carter, Mr. and Mrs. Philip DuMont, Lars Eidnes, James Eike, Edwin McKnight, Peter Pyle, Robert Pyle, and Vee Weggel.

The occurrence of one Limpkin was extraordinary enough in the mid-Atlantic region, but another was discovered in a marshy area at College Lake, in Lynchburg, Virginia, by Paul McQuarry. The bird was found on April 20 and was last seen at least to June 9. It was seen by many observers and a photograph appeared in the June 10 edition of the *Lynchburg Daily Advance*.

It is interesting that this sudden "invasion" of Limpkins into the mid-Atlantic region coincides with a period of severe drought and fires in Florida. One can only speculate that this might be an explanation for the species' presence simultaneously in Maryland and Virginia.

I wish to acknowledge the kindness of Dr. James Pendergrass and Dr. J.P.E. Morrison of the Smithsonian Institution, Mollusk Division, for identification of the snails found at Lily Pons, the personnel of Three Springs Fish Hatchery for tolerating me almost daily for hours at a time, Lars Eidnes for field assistance, and especially Paul G. DuMont for information on the Virginia record, assistance with preparation of these notes, and his unfailing assistance in the field.

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THE 1971 MARYLAND CHRISTMAS BIRD COUNT

David W. Holmes

Christmas Count - ? Oh yes, you mean that spring walk we took back in December?

National Weather Service maps show no snow on the ground for the whole State during our two-week count period. Temperatures averaged about 9° above normal as well. In fact, the lower Eastern Shore did not even have a freeze during the last week in December. So what did this do to the birds and the birders?

It sure helped the birders! More than 500 of them got out for counts this year. Last year we broke 400 for the first time. Our total of 534 does include some birders of the species "Fanaticus incredibilis," known in the vernacular as "Count Hoppers," several of whom managed six to eight counts this year. Party-hours are up in proportion with a one-third increase in foot coverage over last year. In the East especially, time and miles spent on foot are necessary for good numbers of birds. No further sermon needed.

An almost amazing occurrence was the taking of two new counts this year in exactly the areas mentioned last year as most interesting for completion of State-wide coverage. These counts, Garrett County and Point Lookout, join a new Washington County census in providing paper coverage as complete as we need with one possible exception. A revival of either the Colton's Point or Port Tobacco count in Charles County would be very interesting for land birds since Point Lookout is well over 50% water and we have no other full-circle counts in Southern Maryland. The National Audubon Society is also trying to cut down on new counts in the East since there are nearly 1,000 counts done on this continent and the editing and other paper work are close to getting out of hand. The important thing now is to improve coverage in the counts we have already established and there isn't a compiler among us who doesn't have at least one area into which he would surely like to get some more people. In my opinion, the real target counts in the State for increasing coverage are Catoctin and Rock Run. Ten people simply cannot do justice to a 15-mile circle. Chan Robbins or I would be glad to relay your interest to the compilers.

Now, the birds; all the counts with average or better coverage enjoyed record or near-record species counts with good but definitely not record individual counts. And that is the way the cumulative State totals are also; 187 species, plus Baltimore Oriole and Common Redpoll for the count period, is a new high by 12 species over the record of two years ago. The individual count of 757,782 is good but not an exceptional number. Of course, one species made the difference and then some between last year's 997,000 birds and this year's total. Red-winged Blackbirds were down from 332,187 in 1970 to 36,007 in 1971. It is no cause for either rejoicing or alarm. We found only one large blackbird

roost in any of our count circles this year and that one produced Ocean City's 78,000 Common Grackles. Next year? Who knows!

The mild weather induced strange things to stick around, while giving no urgency to the southward migration of our more usual wintering species. Thus White-throated Sparrows and Juncos were down in numbers, but several species established first winter records for the State. At Ocean City, a Barn Swallow, a Chuck-will's-widow, and a White-eyed Vireo were certainly unexpected while the Flamingo would make one wonder about the contents of his thermos! Glossy Ibis appeared on two counts; 3 at Crisfield, and one on Southern Dorchester. Not first records but certainly unusual are the following items; the State-wide total of eight species of herons including Louisiana, Little Blue, and Snowy Egret. The surprise of the Kent County Count was a Blue-gray Gnatcatcher, but then one stayed into January in the Seneca area also. Other lingering oddities included Yellow-breasted Chats on the Kent and Baltimore counts, House Wrens on eleven counts including three Piedmont birds, a Lincoln's Sparrow at Baltimore, a Yellowthroat at Philadelphia (eight counts got Yellowthroats but Philadelphia is the only totally Piedmont count to get one), and a strange variety of things in Garrett County.

The Garrett County effort needs some special mention. That count had been taken in 1949 and again in 1954 reporting 31 and 36 species respectively. Almost all of the count area is over 2,000 feet in elevation. This year was a most unrealistic reintroduction. It started in the rain. All water was open. There was almost no snow. The list, 55 species, surely will not be duplicated for at least 20 years: 10 species of ducks, a Great Blue Heron, 263 Am. Coots, a Belted Kingfisher, a Hermit Thrush, and a Swamp Sparrow - ? These were real but do make a good test of one's credulity. Frustration there was getting skunked on owls until our compiling meeting, where a Screech Owl sat calling by the back door for half an hour, safely two miles outside the circle. Three Common Ravens and 31 Ruffed Grouse made this count distinctive for those of us who do not spend much time in the mountains.

One very odd comparison is this year's 5 Tree Swallows with last year's 900. The weather was certainly milder for longer this year.

Canada Goose	- 261,076	(2)	Again, as last year, 11 spe-
Common Grackle	- 155,546	(3)	cies were found in numbers
Starling	- 61,722	(4)	over 10,000 State-wide.
Red-winged Blackbird	- 36,007	(1)	Here, they are listed in
Whistling Swan	- 17,137	(6)	order, the number in
Common Crow	- 15,894	(5)	parentheses being last
White-throated Sparrow	- 11,803	(8)	year's place on the most
Brown-headed Cowbird	- 10,938	(7)	common list. Slate-colored
Ring-billed Gull	- 10,717		Junco and Mallard dropped
House Sparrow	- 10,146	(11)	off the list this year.
Myrtle Warbler	- 10,111		

Overall, 32 species were seen on one count only and 17 of these were single birds. That is too many to list. An additional 22 species were seen on only two counts. Now for the common ones; 27 species from

Mallard to Song Sparrow were seen on all 19 Maryland counts. This number is down from last year's 31 because of the Garrett County count. There were no Bobwhites, Red-bellied Woodpeckers, Carolina Chickadees, Red-winged Blackbirds, or grackles up there (their chickadees are Black-capped). Washington County was the only one to miss Great Blue Heron and Field Sparrow.

So, do any trends show up? Very few! With the increase in party-hours, one would expect increases in numbers of standard and resident species. It did not happen. Cardinals are noticeably down from 7800 birds last year to 5800 this year. House Finches probably had not arrived yet. Tree and White-crowned Sparrows, and Pileated Woodpeckers registered small increases which actually figure out to be decreases in birds per party-hour. But, Carolina Wrens are up; from 620 birds four years ago to 958 last year and 1245 this year. And bluebirds, after five years of under 200 birds, hit 309 this year. We will be looking especially hard next year to see if this is a real increase, or just birds which had not yet migrated because of the mild weather.

Special congratulations go to about the same places as last year; St. Michaels for owls (1 Barn, 86 Screech, 47 Great Horned, 1 Barred, and 2 Saw-whets) and Seneca for people (65) and for high counts on chickadees, titmice, creepers, etc., most of the common feeder and woods birds. Record numbers of observers turned up on the Triadelphia and Seneca counts while Allegany tied their previous high. There were lots more counts which had increases in party-hours and coverage over last year. That's a fine thing. We'll expect it to keep up. Southern Dorchester celebrated its 25th consecutive count this year and that is also a fine thing.

Again, the summaries of each count, arranged from northwest to southeast. They may help to give a bit of the flavor or excitement of each one even in this painfully limited form. (New high totals are marked with asterisks.)

GARRETT COUNTY - 17 observers, 8 parties, 78 party-hours. 55 species, 2606 individuals. An exceptional count. State-wide high counts on Ruffed Grouse (31), Turkey (7), and Black-capped Chickadee (254). A Snow Bunting was the first record for the county.

ALLEGANY COUNTY - 35 people, 9 parties, 4 feeders, 51 party-hours. 57 species, 3945 individuals. Only Bewick's Wren in the State. A Savannah Sparrow, 5 Purple Finches, a coot and 2 scaup were probably new for the count. 6-year high counts on Mallard, Red-tailed Hawk, Downy Woodpecker, Common Crow, Brown Creeper, E. Bluebird, and Fox Sparrow.

WASHINGTON COUNTY - 28 people, 9 parties, 10 feeders, 51 party-hrs. 65 species, 7485 individuals. A new count. State high count on Wood Duck (50), and House Sparrow (1039). 15 Savannah Sparrows are unusual as are only 3 Tree Sparrows. A Loggerhead Shrike, Pine Warblers, and Rusty Blackbirds are other interesting records.

CATOCTIN MT. - 10 people, 3 parties, 3¹/₂ party-hours. 53 species, 4613 individuals. Very low totals due to insufficient coverage. Tied Crisfield for State high count on Fish Crows (24)! A Pied-billed Grebe was the first for this count.

SENECA - 65* people, 26 parties, 216* party-hours.
97* species, 24,346 individuals. 18 State high counts, 27 new count high totals. New birds for the count were Long-billed Marsh Wren and Palm Warbler. The combination of people and the Potomac do amazing things to this mostly piedmont count.

TRIADELPHIA - 39* people, 14 parties, 7 feeders, 154* party-hours.
83 species (tied previous high), 32,020* individuals. State high counts for Cooper's Hawk (4), Starling (7850), Rusty Blackbird (31). Whistling Swan and Yellowthroat new to the count. New high counts on 8 species, ties on 2 others. First Eastern Phoebe in 10 years. House Sparrows and Horned Larks unusually low.

BALTIMORE - 60 people, 25 parties, 14 feeders, 142* party-hours.
84* species, 16,258 individuals. 33 new high counts. State highs on 8 species including Pheasant (14), Herring Gull (2357), and Red-breasted Nuthatch (25). Lincoln's Sparrow and Yellow-breasted Chat new to the count.

ROCK RUN - 10 people, 6 parties, 34 1/2 party-hours.
83* species, 15,414 individuals. 14 probable high counts (probable because I have not looked up the 1963 and 1964 count records). Fourth year for Green Heron. Green-winged Teal, Lesser Scaup, Golden Eagle, and Loggerhead Shrike new to count.

ELKTON - 12 people, 4 parties, 35 party-hours.
62 species, 29,839 individuals. 15 new high counts. 6 Black-crowned Night Herons new to count. Canada Goose high (23,121) more than doubled previous high count as did Ring-necked Duck and Canvasback totals.

ANNAPOLIS AND GIBSON IS. - 40 people, 16 parties, 97 party-hours.
87 species, 30,722 individuals. 7-year high counts on 9 species. State highs on Am. Widgeon (153), Canvasback (4095), scaup sp. (4658), Ruddy Duck (3162). First Yellowthroats (4) and Green-winged Teal since before 1965.

ACCOKEEK - 4 people, 4 parties, 32 party-hours.
64 species, 6203 individuals. 7-year high counts on 10 species. State high on Red-headed Woodpecker (12). Whistling Swan, Gadwall, Pintail, and House Wren seen for second time since 1965.

POINT LOOKOUT - 15 people, 8 parties, 69 party-hours.
105 species, 15,054 individuals. State high counts on 6 species, all waterbirds. Only Great Cormorants in Maryland (13). Saw-whet Owl and Common Egret recorded only here and one other count.

LOWER KENT COUNTY - 48 people, 8 parties.
121* species, 163,645 individuals. 20 State high counts. Only Dickcissels and counted gnatcatcher in the State. Honors shared with one other count on Yellow-breasted Chat, Grasshopper Sparrow, and Snow Bunting. Red-necked Grebe, Mute Swan, Virginia Rail, and Sharp-tailed Sparrow for the first time since at least 1965.

ST. MICHAELS - 27 people, 9 parties, 92 party-hours.
101 species, 96,294 individuals. State high counts on 9 species. Only Barn Owl in the State. Mute Swan, Semipalmated Plover, and Saw-whet Owl here and on one other count. Probable count highs on 7 species.

S. DORCHESTER - 24 people, 11 parties, 154* party-hours.
121* species, 53,207 individuals. 12 State high counts including Bald (19) and Golden (2) Eagles. Glossy Ibis, Forster's Tern, and Water Pipit here and one other count. Count highs on 9 species including Great Blue

Heron, Whistling Swan, Clapper Rail, Am. Woodcock, Common Snipe, House Wren, and Evening Grosbeak. Missed cowbird completely. An exciting 25th count.

DENTON - 14 people, 11 parties, 67 party-hours.

79* species, 16,046 individuals. State high on Horned Lark (112). First Horned Grebe, Whistling Swans, Ruddy Duck, and Red-headed Woodpecker since at least 1965. 7-year highs on 19 species.

SALISBURY - 22 people, 9 parties, 61* party-hours.

77 species, 76,235 individuals. State high on Cedar Waxwings (739), Red-winged Blackbirds (8800, a very low State high), and Red Crossbill (6, reported only here and Crisfield). Whistling Swan, Ruddy Duck, House Wren, and Yellowthroat new to count.

CRISFIELD - 26 people, 11 parties, 135 party-hours.

123 species, 24,495 individuals. 17 State high counts. Only Little Blue Herons (2), and Western Sandpipers (2) in the State. Shared 8 species with only one other count, including Short-billed Marsh Wren and King Rail. Glossy Ibis, Bonaparte's Gull, and House Finch new to count.

OCEAN CITY - 37 people, 12 parties, 190 party-hours.

152* species, 141,131 individuals. 21 species found only on this count. 10 more found here and only one other count. State high counts on 35 additional species. Count highs on 16 species including Sparrow Hawk, Yellow-shafted Flicker, Yellowthroat, and House Finch. Snowy Egret, Am. Flamingo, Little Gull, Chuck-will's-widow, Barn Swallow, and White-eyed Vireo new to the count. Royal Tern reported for the second time.

Once again we are printing the Christmas Count lists for our sanctuaries. The big differences this year were that Carey Run now supports a very large feeder which apparently attracts birds from a huge area, and that Rock Run counting was done totally within sanctuary boundaries this year. The Irish Grove and Rock Run lists were taken as part of their respective Christmas Counts. The Carey Run count was done on January 12.

CAREY RUN - Clear, wind 30-40 m.p.h., 30-40°. Ground bare, pond open. 8 party-hours.

Red-tailed Hawk	1	Common Crow	2	Cardinal	2
Red-shouldered Hawk	1	Blk-c. Chickadee	97	Evening Grosbeak	29
Rough-legged Hawk	1	Tufted Titmouse	17	Am. Goldfinch	16
Marsh Hawk	1	Wht-br. Nuthatch	5	Rufous-sided Towhee	1
Ruffed Grouse	2	Brown Creeper	1	Slate-col. Junco	43
Pileated Woodpecker	1	Golden-cr. Kinglet	4	Tree Sparrow	18
Hairy Woodpecker	2	Myrtle Warbler	1	White-cr. Sparrow	1
Downy Woodpecker	4	House Sparrow	24	Song Sparrow	1
Blue Jay	9		25 species,	296 individuals.	

ROCK RUN - Dec. 18. Clear, wind gusty to 30 m.p.h., 26-35°, no snow. 3/4 hour, John Wortman

Yel-shafted Flicker	2	Tufted Titmouse	7	Rufous-sided Towhee	2.
Red-bell. Woodpecker	1	Carolina Wren	1	White-thr. Sparrow	34
Common Crow	1	House Sparrow	10	Song Sparrow	1
Caro. Chickadee	9	Cardinal	5	11 sp., 73 indiv.	

MILL CREEK - No count received.

IRISH GROVE - Dec. 30.	Cloudy, occasional rain, wind 5-20 m.p.h., 37°.		
	Tommy and Clay Andres, Paul Bystrak, George Robbins.		
Pied-billed Grebe	1 Lesser Yellowlegs	3 Robin	18
Gt. Blue Heron	27 Dunlin	102 Hermit Thrush	5
Whistling Swan	2 Semip. Sandpiper	6 E. Bluebird	11
Canada Goose	11 Western Sandpiper	2 Golden-cr. Kinglet	8
Mallard	5 Herring Gull	17 Ruby-cr. Kinglet	2
Black Duck	181 Ring-billed Gull	20 Starling	2
Pintail	4 Mourning Dove	261 Myrtle Warbler	550
Green-winged Teal	34 Screech Owl	1 W. Palm Warbler	1
Blue-winged Teal	2 Short-eared Owl	1 E. Meadowlark	601
Am. Widgeon	4 Belted Kingfisher	4 Red-wg. Blackbird	529
Lesser Scaup	1 Yel-shafted Flicker	21 Boat-t. Grackle	32
Common Goldeneye	6 Red-bell. Woodpecker	1 Brown-hd. Cowbird	24
Bufflehead	30 Hairy Woodpecker	2 Cardinal	25
Common Scoter	1 Downy Woodpecker	5 Evening Grosbeak	142
Red-br. Merganser	8 Tree Swallow	2 Pine Siskin	7
Turkey Vulture	43 Common Crow	15 Am. Goldfinch	64
Black Vulture	4 Fish Crow	1 Rufous-side. Towhee	9
Sharp-shinned Hawk	2 Caro. Chickadee	21 Savannah Sparrow	32
Cooper's Hawk	1 Tufted Titmouse	1 Sharp-t. Sparrow	9
Marsh Hawk	15 Brown-hd. Nuthatch	37 Seaside Sparrow	3
Sparrow Hawk	3 Brown Creeper	1 Slate-col. Junco	2
Bobwhite	10 House Wren	1 Field Sparrow	5
King Rail	4 Carolina Wren	16 White-thr. Sparrow	61
Clapper Rail	3 Long-b. Marsh Wren	4 Fox Sparrow	14
Virginia Rail	8 Short-b. Marsh Wren	1 Swamp Sparrow	171
Am. Woodcock	1 Mockingbird	5 Song Sparrow	103
Common Snipe	1 Catbird	2	
	Brown Thrasher	5 83 sp., 3407 indiv.	

It was an interesting year. It will be hard to beat for oddities but should at least be equalled for coverage and fun. I'm looking forward to it anyway. See you then.

1524 Mt. Royal Ave., Baltimore

REQUEST FOR SANDERLING INFORMATION

Several requests for information on color-marked birds appear on page 39. This one is listed separately for special emphasis and to present more details on the nature of the study.

Several hundred Sanderlings will be color-marked this fall at Long Point Bird Observatory on the north shore of Lake Ontario to study the relation between fat deposition and migration. Feather dye on the breast and abdomen will indicate the amount of fat each bird was carrying when banded. In addition, each bird will have a semi-permanent colored wing tag on each wing for individual identification. Thus birds can be individually identified at sight. Adults will be banded on the right leg, immatures on the left.

Most of these birds can be expected to pass through Maryland. Let's make a special effort to search for them. Report full details of all sightings to Long Point Bird Observatory, Long Point, Ontario.

SANCTUARY NEWS

A strategically located plot of ground adjacent to the MILL CREEK Sanctuary has been donated to us by the owner. It consists of approximately two acres lying north of Highway 662 and west of Mill Creek. This acquisition gives us title to all the wooded frontage on both sides of the highway on both sides of the stream from which the sanctuary derives its name.

Trail signs in the form of yellow arrows have been installed here at MILL CREEK to mark the nature trails. The local Scout Troop spent a weekend at the sanctuary recently, and, in appreciation, contributed many man-hours of labor on the trails and in policing up the grounds and roadside area.

The property bequeathed to us by MRS. MYRTLE PELOT, as reported in December *Birdlife*, has been sold, netting the Society a bit over thirty-four thousand dollars, all for the benefit of our sanctuary program. By resolution of the Trustees at Blackwater on March 11, a committee was named to report upon the apparent wishes of the testator and to make recommendations as to the use of the funds derived.

The Society has purchased a tract of twelve acres at IRISH GROVE, seeking eventually to bring all property lines at the north and east out to the existing highways.

A new nature trail was laid out at IRISH GROVE by George and Stuart Robbins. Rustic markers were installed to call attention to notable plant specimens. The trail begins at a point on the existing Round Pond trail and leads through a wooded area to the edge of the marsh, then along the marsh and back to Round Pond. Repairs and improvements to the house deserve especial mention. Also, many additions have been made to the collection of mounted birds (all specimens are accidental kills). The eighteen bluebird houses have all been mounted on new metal posts to lessen predation.

Gladys Cole concluded her third fall migration banding operation at IRISH GROVE in October, giving demonstrations to Salisbury and Crisfield school groups. University of Buffalo students and a professor from Montclair College observed portions of the operation.

Miss Aline Mitchell, member of the Wicomico Chapter, has been appointed librarian for IRISH GROVE. She is experienced in the work and will arrange existing books, pamphlets and papers and will provide a system for handling additions to the library.

V. E. Unger, Chairman, Sanctuary Committee

NOTE: For Irish Grove information or reservations contact the new I.G. Sanct. Comm. Chairman, Robert Heatwole, 803 Alvin Ave., Salisbury (742-7270).

THE PRESIDENT'S PAGE

The final meeting of the 1971-72 MOS Board of Trustees was held at Blackwater National Wildlife Refuge on March 11, 1972. Some of the highlights of the meeting of greatest general interest are reported on this page so that all members may have an opportunity to know what their organization is doing and what plans are being made for the future.

The Treasurer reported a balance of more than \$48,000 in our treasury, more than \$40,000 of which is in our Sanctuary Fund.

The appointment of Mrs. Alger Zapf, Jr. of Baltimore as Executive Secretary was announced. Mrs. Zapf is replacing Miss Mildred Cole who recently retired from the position and whose long and devoted service to our organization in this capacity will never be forgotten.

The Scholarship Committee announced the selection of three recipients of MOS Audubon Camp Scholarships from 10 applicants. One of these, the Helen Miller Scholarship, was awarded to Dr. Benjamin T. Poscover of Towson. Another scholarship was awarded to Mr. Kenneth G. Biomquist of North East; and a third scholarship, financed by the Amateur Gardeners' Club of Baltimore, was awarded to Miss Beth Ball of Annapolis. Subsequent to the Trustees' meeting, the Baltimore Chapter awarded an additional scholarship to Mrs. Barbara Rothgaber of Baltimore.

Two proposed amendments to the MOS By-Laws were approved by the Trustees and are being presented to the membership for consideration at the annual Membership Meeting in May. One of these amendments would provide for two new classes of membership and an increase in dues for certain classes of membership.

The Sanctuary Committee reported that the program for registering private properties as MOS Sanctuaries is proving very successful. More than 14,000 acres have already been registered.

The matter of MOS financial liability in the event of personal injury resulting from MOS sponsored activities was discussed. This matter will be investigated with a view toward possibly acquiring suitable liability insurance.

It was decided that MOS will cooperate with the Nature Conservancy and the Smithsonian Institution in a survey of ecologically significant sites in the Chesapeake Bay area.

Belt Woods in Prince Georges County, the largest stand of virgin forest in Maryland, is being willed to the Episcopal Church. MOS will point out to the Church the importance of maintaining this ecologically valuable tract in its virgin state.

Jan Reese plans to set out 22 Osprey nesting platforms in Chesapeake Bay and needs volunteers to help with the work.

The recent press release on our Bluebird Project resulted in more than 700 requests for the MOS printed instructions for making and mounting bluebird boxes. A report has been received indicating that bluebirds in large numbers are being inadvertently killed on tobacco farms by entering the flues of the pot-type oil burners used for curing tobacco. The birds enter these flues in search of roosting or nesting sites and become trapped. MOS has requested the Secretary of Agriculture to urge tobacco farmers to install protective screens on the rain caps of these flues to prevent this needless slaughter.--*Lawrence Zeleny*

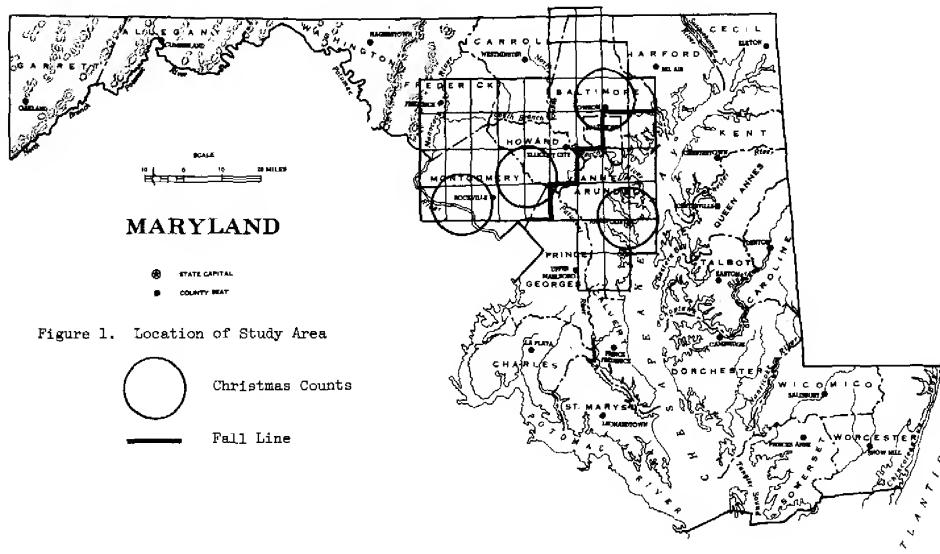
WINTER BIRD SURVEY, 1972

Danny Bystrak and Chandler S. Robbins

INTRODUCTION

For the third successive year members of the Maryland Ornithological Society and the Delmarva Ornithological Society cooperated with the U.S. Bureau of Sport Fisheries and Wildlife in making a series of systematic counts of winter bird populations in central Maryland and northern Delaware (see Fig. 1). The results of the Maryland survey are summarized here. For reports of the 1970 and 1971 coverage, the reader is referred to the March 1970 and March 1971 issues of *Maryland Birdlife* (26: 11-20, and 27: 31-38).

The main purpose of the Winter Bird Survey is to test the effectiveness of this method as a means of monitoring changes in bird populations during the midwinter period. Previous results as well as those reported here show that this type of systematic standardized sampling of bird populations is an effective means of measuring changes in winter bird populations from year to year.



METHODS

The method of covering the routes in 1972 was identical to that used the previous two years. Observers (either one, or two working together) began at the same starting point and followed the same five-mile closed route in a period of four hours. This year, five new routes were laid out in Anne Arundel Co.; these also had the "key point" at the center of the respective 7 1/2 minute topographic map.

Each observer recorded all birds seen or heard by hourly periods. Birds seen or heard more than one-quarter mile from the observer were recorded separately. This separate listing of distant birds is done to avoid uneven sampling of those conspicuous species which can be detected at a great distance.

The routes were covered during the period January 15 through February 15, 1972. This time period was established with the intent that the Winter Bird Survey sample midwinter rather than early winter populations. A survey conducted several times from December through March on the Patuxent Wildlife Research Center and other data suggest that February 15 may be too late, since large numbers of blackbirds and in some years such species as Fox Sparrows and Robins start migrating by this time (note that the Robin was one of the top ten in 1971). More serious than the presence of these early migrants is the singing factor. By the second week in February many species have started to sing; among these, the most conspicuous are Mourning Dove, Carolina Wren, Tufted Titmouse, Red-winged Blackbird, Cardinal and Song Sparrow. On a sunny, still morning in early February, the counts of some species will be greatly increased by these early singers.

The problems associated with the second week in February might not be so severe if it were not for the distribution of dates on which the routes are surveyed. Of the four-week period, the second week in February (the fourth week of the period) is the least favorable, and the fourth week of January (the second week of the period) is the most favorable for accurate midwinter sampling since by this time few lingering semi-hardy birds are left, water has usually frozen, and the effects of early singing and early migrants are not felt. In the three years of this project, 43 percent of all routes were run in the fourth week of the period and only 8 percent in the second week. Extremes are in 1972 when 56 percent were run in the fourth week and in 1970 when no routes were run in the second week.

COVERAGE

The area covered on the Maryland Winter Bird Survey in previous years included all of Baltimore, Howard and Montgomery Counties and parts of four adjacent counties. Coverage was expanded by five Anne Arundel County routes in 1972, completing the coverage of that county. This was done in order to achieve better representation of the Coastal Plain; the Piedmont to Coastal Plain ratio in the past has been 32 to 9 (1972 ratio is now 32 to 14), and 6 of the 9 Coastal Plain routes previously surveyed

are in excessively disturbed areas. Of the 46 designated routes, 44 were covered, including 39 of the original 41 established in 1970. The two-year comparisons in this summary are based on these 39 routes, 37 of which were run in both 1971 and 1972, and 34 of which were covered by the same observer in both years.

Continuity is an important factor in any survey of this nature. If comparisons are to be made on a year-to-year basis, it is important that any route be covered as similarly as possible from year to year. This is best accomplished by the same person covering a route rather than changing observers, since abilities and techniques differ widely among observers. On the Winter Bird Survey, we have managed to maintain 34 routes with the same observers two years in a row and 26 routes with the same observers all three years.

WEATHER

An abundance of rainfall during the 1971 growing season and a warm and open autumn set the stage for an extraordinary winter season in Maryland. Temperatures averaged 5° (F.) above normal in October, 0.5° below normal in November, and 7° above normal in December. Every week in January also had an above-normal temperature average, and the total snowfall for December and January was barely measurable. Had it not been for a surge of cold weather in the first half of February, the 1972 Winter Bird Survey would have been plagued with large numbers of spring migrants before the closing date of Feb. 15. Actually, temperatures in the first half of February averaged 6° below normal, and few migrants other than Red-wings and Common Grackles had arrived by the 15th.

Temperatures at starting time ranged from 15° to 48° (mean 23°). Five of the 44 routes had wind speeds in excess of 12 m.p.h. at the start, and 33 routes reported winds of 3 m.p.h. or less. Skies were clear at the start on 24 routes, partly cloudy on 12, and overcast on the other 8. No 1972 route was covered during snow, rain or fog.

SPECIES

A record total of 88 species was recorded in the 1972 coverage on the 39 routes in the area covered all three years. The five additional routes in Anne Arundel County added another four species to this total. The total of 88 species is four higher than in each of the previous years. The species totals on individual counts ranged from 20 to 45 although one new route had 46. Both these numbers are higher than their counterparts in the previous two years. The mean number of species per route jumped from 29 in 1971 to 31 in 1972; 1970 mean was 28 species per route.

As in 1971, six species were found on all Maryland routes. The six are Blue Jay, Common Crow, Starling, House Sparrow, Cardinal and Song Sparrow. These were the same as in 1971 except that Blue Jay replaced Downy Woodpecker, which was reported on all but one route in 1972.

Sixteen species were reported from only one route in Maryland in

1972. These were: Wood Duck, Greater Scaup, Lesser Scaup, Oldsquaw, Ruddy Duck, Cooper's Hawk, American Woodcock, Barred Owl, Eastern Phoebe, Red-breasted Nuthatch, House Wren, Loggerhead Shrike, Pine Warbler, Red Crossbill, House Finch and Lapland Longspur.

Species new to the Winter Bird Survey in 1972 were Horned Grebe, Canvasback, Greater Scaup, American Woodcock, Eastern Phoebe, House Wren, Catbird, Brown Thrasher, House Finch and Lapland Longspur. Species missed for the first time in 1972 were Green-winged Teal and Black Vulture. Species which were missed in 1971 but recorded in 1970 and 1972 were: Oldsquaw, Ruddy Duck, Cooper's Hawk, Barred Owl, Red-breasted Nuthatch, Ruby-crowned Kinglet, Red Crossbill, Evening Grosbeak and Common Redpoll.

ABUNDANCE

The ten species counted in largest numbers in each of the three years of the Survey are summarized in Table 1; a fourth column (1972AA)

Table 1. Comparison of the Top Ten Species each Year

	<u>1970</u> (40 routes)	<u>1971</u> (38 routes)	<u>1972</u> (39 routes)	<u>1972AA</u> (44 routes)
Starling	6452	Starling	6324	Com. Grackle 15596
Red-wing	3178	Com. Grackle	4823	Starling 5498
Com. Crow	2090	Com. Crow	2381	Red-wing 2104
House Spar.	1945	House Spar.	1703	Com. Crow 2069
S-col. Junco	1196	White-throat	1270	Gr. Scaup 2364
Tree Spar.	843	S-col. Junco	1129	Com. Crow 2197
White-throat	705	Blue Jay	1064	White-throat 1677
Cardinal	645	Cardinal	821	S-col. Junco 1439
Rock Dove	533	M. Dove	756	B-h. Cowbird 1184
C. Chickadee	492	Robin	741	S-col. Junco 1637
				B-h. Cowbird 1188
				Blue Jay 1120

includes the five new Anne Arundel County routes. Only five species have maintained a position on the "top ten." These are Starling, Common Crow, House Sparrow, Slate-colored Junco and White-throated Sparrow. It is interesting to note that 7 of the 10 positions show a steady numerical increase and all 10 are higher in 1972 than 1970. This would suggest that the total number of birds wintering in the study area is increasing. Most likely this increase is a reflection of the mild winters, and a cold winter will bring these numbers back down. The fact that House Sparrow and Slate-colored Junco take a lower place each year is not an indication of any population decline, but rather of the fact that other species have shown greater increases than these two. The total number of both species is, in fact, up considerably from last year.

In the 1971 report (*Maryland Birdlife* 27: 31-38), a table was presented to show changes in bird population from 1970 to 1971 as detected by the Winter Bird Survey. A similar table (Table 2) is shown here to include figures for 50 species of land birds for all three years of the Survey, 1970-72. The last two columns of the table show percentage changes from year to year. Bear in mind that a change from 40 to 20

Table 2. Comparison of Weighted Means

Species	1970	1971	1972	Percent Change	
				1970-71	1971-72
Turkey Vulture	1.75	1.94	1.75	+ 11%	- 10%
Red-tailed Hawk	0.52	0.82	0.85	+ 57	+ 4
Red-shouldered Hawk	0.28	0.37	0.75	+ 32	+ 103
Sparrow Hawk	0.33	0.70	0.34	+ 103	- 51
Bobwhite	5.74	4.84	3.49	- 16	- 28
Ring-necked Pheasant	1.02	0.52	1.36	- 49	+ 162
Killdeer	0.10	0.65	1.39	+ 550	+ 114*
Mourning Dove	13.23	20.35	22.38	+ 54	+ 10
Yellow-shafted Flicker	1.57	2.36	2.23	+ 50	- 6
Pileated Woodpecker	0.48	0.31	0.54	- 35	+ 74
Red-bellied Woodpecker	2.95	6.71	4.51	+ 127**	- 33*
Hairy Woodpecker	0.84	1.03	1.00	+ 23	- 3
Downy Woodpecker	7.67	6.19	5.87	- 19	- 5
Horned Lark	4.77	4.56	1.64	- 4	- 64*
Blue Jay	7.85	27.35	25.20	+ 248**	- 8
Common Crow	56.32	63.22	53.05	+ 12	- 16
Black-capped Chickadee	4.99	0.54	0.31	- 89	- 43
Carolina Chickadee	11.98	13.40	11.15	+ 12	- 17
Tufted Titmouse	9.47	11.46	10.51	+ 21	- 8
White-breasted Nuthatch	2.14	2.41	1.69	+ 13	- 30
Red-breasted Nuthatch	0.27	0.00	0.00	- 100*	0
Brown Creeper	1.65	1.28	1.52	- 22	+ 19
Winter Wren	0.20	0.45	0.46	+ 125	+ 2
Carolina Wren	3.36	4.67	6.26	+ 39**	+ 34**
Mockingbird	5.48	6.11	6.97	+ 11	+ 14
Robin	1.66	20.08	1.23	+1110**	- 94**
Eastern Bluebird	0.14	0.44	0.98	+ 214	+ 123
Golden-crowned Kinglet	2.33	1.58	2.38	- 32	+ 51
Cedar Waxwing	0.48	4.54	2.05	+ 846*	- 55
Starling	171.57	167.00	140.96	- 3	- 16
Myrtle Warbler	0.11	0.16	0.28	+ 45	+ 75
House Sparrow	51.24	44.83	46.28	- 12	+ 3
Eastern Meadowlark	2.04	7.67	8.59	+ 276**	+ 12
Red-winged Blackbird	51.21	19.39	53.94	- 62	+ 178**
Common Grackle	26.45	129.47	397.70	+ 389	+ 207
Brown-headed Cowbird	19.53	20.00	30.36	+ 2	+ 52
Cardinal	17.32	21.94	18.43	+ 26	- 16
Evening Grosbeak	3.35	0.00	7.43	- 100	+ 122#
Purple Finch	0.75	0.24	2.05	- 68	+ 173#
Common Redpoll	0.35	0.00	2.70	- 100	+ 671#
Pine Siskin	0.94	0.02	5.36	- 98	+ 470#
American Goldfinch	6.61	9.83	13.59	+ 49	+ 106#**
Red Crossbill	2.22	0.00	0.03	- 100	- 99#
Rufous-sided Towhee	0.43	0.95	0.77	+ 121	- 19
Slate-colored Junco	31.87	30.31	38.44	- 5	+ 27
Tree Sparrow	26.87	10.69	10.38	- 60	- 3
Field Sparrow	3.16	5.19	8.80	+ 64	+ 70*
White-throated Sparrow	18.69	33.07	42.99	+ 77*	+ 30
Swamp Sparrow	0.16	0.68	0.64	+ 325*	- 6
Song Sparrow	7.61	19.48	22.02	+ 156**	+ 13

* significant at the 95% level of probability

** significant at the 99% level of probability

% change from 1970 to 1972

registers as -50%, whereas a change from 20 back to 40 is +100% and a change from 20 to 80 is +300%! Thus it is quite common to have increases of several hundred percent, but it is impossible to have a decrease of more than 100 percent.

In general, changes between about -15% and +30% are within the normal range of sampling error and do not imply that population changes took place. Flocking species such as the Cedar Waxwing and Evening Grosbeak have a much larger margin of sampling error. For birds such as the Common Redpoll and Red Crossbill that are found on fewer than ten counts per year, the percentage change may be enormous and not be statistically significant.

The weighted means for 1970 and 1971 in Table 2 are based on all 37 routes covered both years (as in Table 2 of the 1971 report). The weighted means for 1972 were computed from the 39 routes covered in the same geographic area in 1972, and the analysis of variance for 1971-72 was based on the 37 routes that were run in both 1971 and 1972.

Ten species (marked with asterisks) showed a statistically significant change from 1970 to 1971. Of these, 9 increased and only one, the Red-breasted Nuthatch, decreased. Between 1971 and 1972, 8 species changed sufficiently to be statistically significant and 5 of these increased while 3 decreased. A few comments about these species follow.

The increase in the Killdeer, Carolina Wren and Field Sparrow certainly reflect the mild 1971-72 winter. The decrease in the Red-bellied Woodpecker partly balances the increase of the previous year. The drop in number of Horned Larks tallied quite obviously is related to the remarkable absence of snow cover in 1972, because the birds were widely scattered instead of being concentrated in freshly manured fields. The decline in Robin numbers is merely a return to normal after last year's count, which included many early migrants. Red-wings were more common in 1972 for two reasons: more wintered in roosts within the Survey area, and males were singing on territory in the last week of the Survey. The northern finches, which were all but absent in 1971, are compared with 1970, the last "flight" year. Except for the two species of crossbills, all species increased dramatically, making 1972 one of the best northern finch winters on record in Maryland. Because of the spotty distribution

Table 3. Finches on the Winter Bird Survey

Species	Percent of Routes			Total Individuals		
	1970	1971	1972	1970	1971	1972
Evening Grosbeak	28	0	62	124	0	290
Purple Finch	25	11	41	28	9	80
Common Redpoll	5	0	5	12	0	81
Pine Siskin	8	3	28	35	1	209
American Goldfinch	70	79	92	259	382	530
Red Crossbill	15	0	3	81	0	1
White-winged Crossbill	5	0	0	19	0	0

Table 4. Comparison of Christmas Bird Count and Winter Bird Survey, 1972

Species	Birds per 1/4 party-hours			
	Piedmont		Coastal Plain	
	WBS	CBC	WBS	CBC
Turkey Vulture	2.27	3.29	0.50	1.69
Red-tailed Hawk	1.07	0.49	0.50	0.33
Red-shouldered Hawk	0.67	0.32	0.93	0.04
Sparrow Hawk	0.33	0.90	0.21	0.82
Bobwhite	3.37	2.85	5.57	3.46
Ring-necked Pheasant	1.77	0.18	0.00	0.00
Killdeer	1.57	1.22	0.86	0.41
Mourning Dove	22.60	17.51	24.93	9.98
Yellow-shafted Flicker	2.23	2.68	2.79	2.14
Pileated Woodpecker	0.40	0.37	1.00	0.08
Red-bellied Woodpecker	4.67	3.00	6.50	3.21
Hairy Woodpecker	0.87	0.65	1.50	0.61
Downy Woodpecker	5.70	4.70	6.64	3.26
Horned Lark	2.07	0.41	0.14	0.00
Blue Jay	22.63	12.72	31.50	8.70
Common Crow	63.36	16.84	21.14	9.57
Black-capped Chickadee	0.40	0.26	0.14	0.00
Carolina Chickadee	10.63	14.22	18.43	9.86
Tufted Titmouse	8.90	7.24	15.21	5.65
White-breasted Nuthatch	1.93	1.56	0.79	0.41
Red-breasted Nuthatch	0.00	0.31	0.07	0.08
Brown Creeper	1.47	1.60	1.92	0.99
Winter Wren	0.63	0.37	1.36	0.16
Carolina Wren	5.27	3.52	10.86	4.74
Mockingbird	6.40	7.15	8.57	6.97
Robin	1.50	0.70	1.93	2.52
Eastern Bluebird	1.27	0.77	0.57	0.87
Golden-crowned Kinglet	2.03	3.10	3.43	0.16
Cedar Waxwing	2.63	0.79	1.71	2.39
Starling	145.97	156.80	102.57	116.25
Myrtle Warbler	0.20	2.88	1.43	0.66
House Sparrow	42.27	15.28	49.79	22.80
Eastern Meadowlark	10.77	3.33	2.21	2.56
Red-winged Blackbird	57.53	3.79	46.57	222.19
Common Grackle	515.87	104.30	6.00	63.01
Brown-headed Cowbird	31.50	33.41	17.36	5.90
Cardinal	16.23	16.51	30.29	16.12
Evening Grosbeak	8.83	7.66	5.07	0.49
Purple Finch	1.97	2.19	4.79	0.91
House Finch	0.03	1.89	0.00	0.66
Common Redpoll	2.70	0.00	0.00	0.00
Pine Siskin	5.30	0.27	3.79	0.16
American Goldfinch	14.13	13.38	11.14	5.69
Red Crossbill	0.03	0.00	0.00	0.00
Rufous-sided Towhee	0.43	1.15	3.07	1.24
Slate-colored Junco	34.43	32.73	40.93	32.95
Tree Sparrow	12.60	5.18	6.14	5.44
Field Sparrow	9.67	7.56	8.29	2.02
White-throated Sparrow	45.93	32.49	45.64	19.42
Swamp Sparrow	1.93	0.89	1.43	0.12
Song Sparrow	24.40	13.56	16.64	5.94

of the winter finches, often in large flocks, only the American Goldfinch showed a statistically significant increase. Yet the counts for the other finches are also of interest (see Table 3); the five new routes from southern Anne Arundel County are not included in Table 3.

Once again the Winter Bird Survey totals for many species were compared with the four Christmas Bird Counts that were taken within the same geographic area: Baltimore, Triadelphia and Seneca in the Piedmont, and Annapolis--Gibson Island in the Coastal Plain. Because many species are more common in the Coastal Plain than in the Piedmont (or *vice versa*), separate averages were computed for each of these physiographic provinces. The averages shown in Table 4 are based on all 30 Piedmont routes and all 14 Coastal Plain routes that were run in 1972.

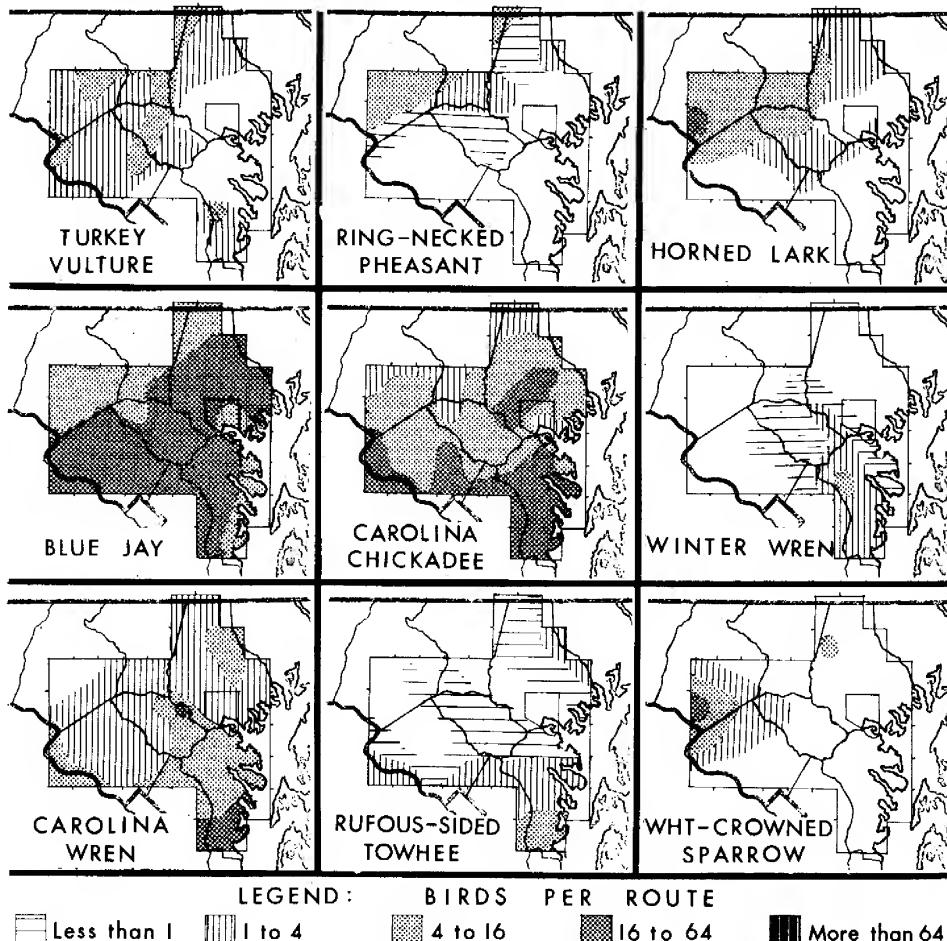


Figure 2. Distribution and abundance of 9 species from the Winter Bird Survey (3-year means)

For most species the Winter Bird Survey totals continue to be higher than those obtained on the Christmas Bird Counts, yet there is much similarity between the two sets of data. Some of the major differences are easily accounted for. Most of the Pine Siskins and Common Redpolls arrived in January or February after the Christmas Bird Counts had been taken. The Evening Grosbeaks began to arrive during the Christmas Bird Counts and did not reach winter numbers until January. Red-wings and grackles wintered in large local concentrations, so numbers were extremely variable from place to place and even from day to day. House Finches, which were almost entirely missed (only 1 bird) on the Winter Bird Survey, were seen on all of the Christmas Bird Counts, which sample feeding stations much better than does the Winter Bird Survey.

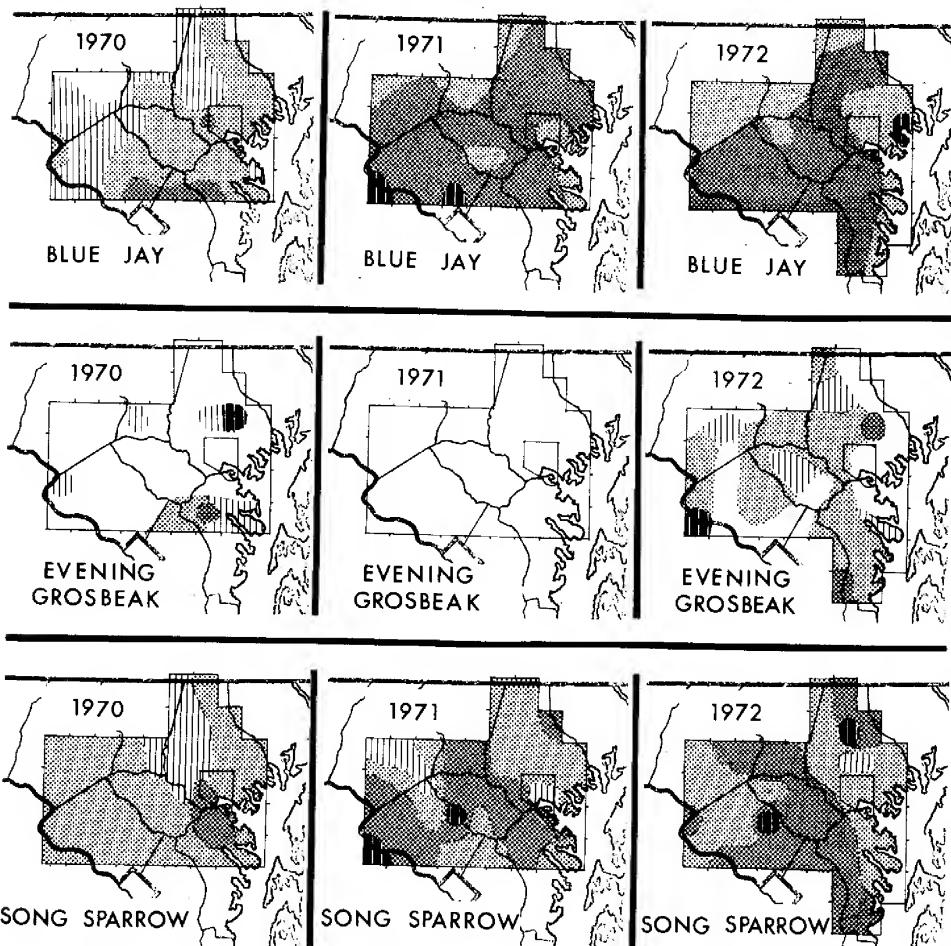


Figure 3. Three-year comparisons of distribution and abundance of 3 species from the Winter Bird Survey

DISTRIBUTION

Maps showing distribution and relative abundance of nine species are shown in Figure 2. Each map is based on three-year means (except for the new southern Anne Arundel County routes).

For all these species except the Blue Jay, there is a distinct difference in abundance between the Piedmont and Coastal Plain.

Changes in abundance from year to year are illustrated for three species in Figure 3.

ACKNOWLEDGMENTS

We wish to thank the following observers who participated in the 1972 Maryland Winter Bird Survey. Without their continued interest this study of our changing bird populations would not have been possible:

Dr. Reuben Andres, Tommy Andres, Olin Browne, Charles M. Buchanan, Edward S. Buckler, Danny Bystrak (6 routes), Kenneth Carr, Scott Clemson, Mrs. Robert Cochran, Mrs. Richard D. Cole, Janice H. Cooper, William Czajkowski, Mr. and Mrs. Morrill B. Donnald, Lynn Fowler, Douglas L. Frost, Robert H. Hahn, Lynn Hanson, Dr. Robert M. Herndon, Dr. and Mrs. Howard M. Hodge, David Holmes (2), Craig and Clark Jeschke, Morgan Jones, Hank and Peter Kaestner, C. Haven Kolb, Stephen Marshall, Taylor McLean (2), Albert McManus, W. Graham Metson, R. Neal and Patricia Moore, Dr. and Mrs. Harvey Mudd, Charles L. Mullican, Stanley Nesbitt, Dr. J. William Oberman, Albin M. Plant, Chandler S. Robbins (6), K. Friel Sanders, Dr. William N. Shirey, Willet T. Van Velzen, Prof. Harold Wierenga (2), Comdr. Edward P. Wilson, Robert J. Werrlein, Paul W. Woodward, Dr. and Mrs. Elmer Worthley.

U.S. Bureau of Sport Fisheries and Wildlife
Migratory Bird Populations Station, Laurel

DICKCISSEL IN NORTHERN FREDERICK COUNTY IN SUMMER

Bruce Beehler

Having been given the privilege to participate in the Breeding Bird Survey, Bill Johnson and I set out for our Emmitsburg route early on June 23, 1971. We certainly never expected to find anything quite so unusual as the Dickcissel (*Spiza americana*).

After following our route through the town of Emmitsburg, we headed in an easterly direction through a heavily farmed region. Our first ten stops were relatively uneventful. At a few minutes after six we stopped 200 yards before a farm house. Both sides of the road were cultivated in alfalfa. Leaving the car we immediately heard a call that was unfamiliar to us. Flushing the bird from the field, we watched as it flew up to a

nearby telephone line. From this vantage point I could discern the bird's yellow breast and black bib. It was early, and the light was poor. I wished to get closer for a better look. It was then that we heard a similar call in the adjacent field. This was apparently the female, because it was very drab and sparrow-like. This one kept moving, so we had only short looks at it.

Realizing that the bird survey was in progress, we had to move on. Still, we were amazed at the fact that we had seen two Dickcissels!

When I got home, I checked the calls with the album "A Field Guide to the Bird Songs." I also checked Stewart and Robbins' "Birds of Maryland and the District of Columbia" (1958) and noted that Dickcissels had been found to breed in the vicinity of Emmitsburg by Dr. John W. Richards.

5007 Blythewood Road, Baltimore

ACCIDENTAL MORTALITY OF DIVING DUCKS AT ST. MARYS COLLEGE ST. MARYS, MARYLAND

Louis N. Locke

On the morning of January 24, 1969, a group of about 300 sick and dead diving ducks was observed on the river and on a lagoon near the St. Marys College Campus, St. Marys, Maryland. Other dead or sick ducks were reported on and around the campus parking lot.

The sick ducks dropped into the water, swam briefly in circles, and some of them subsequently died. A group of the affected ducks was collected and brought to the Patuxent Wildlife Research Center for diagnostic studies. The group of ducks submitted consisted of eight Lesser Scaup (*Aythya affinis*), three Redheads (*A. americana*), one Greater Scaup (*A. marila*) and one Canvasback (*A. valisineria*).

Necropsy revealed that all of the ducks had been in good flesh prior to death and had excellent deposits of subcutaneous and abdominal fat. Subcutaneous and muscular hemorrhages were present in all the ducks. One female Lesser Scaup had a laceration of the skin and the pectoral muscles exposing the sternal keel bone, which had been fractured. The male Greater Scaup had multiple fractures of the ribs with subsequent massive pulmonary hemorrhage.

Internally there were ruptures of the liver lobes in all ducks examined; frequently one lobe was pulverized. Adjacent air sacs were filled with clotted blood. Five of the Lesser Scaup, two of the Redheads, the Greater Scaup and the Canvasback had lacerations of the great veins leading into the heart with massive hemorrhage into the pericardial sac. Additional hemorrhages occurred in and around the kidneys, spleen, and lungs in all the ducks.

No lesions suggestive of duck viral enteritis (DVE) were found and virological attempts to isolate DVE virus from the Canvasback were negative. Material from the livers of five Lesser Scaup and one Redhead was cultured aerobically on 5 percent sheep blood agar plates in an effort to determine if avian cholera (*Pasteurella multocida*) might have been involved in causing these losses. All attempts to isolate *Pasteurella multocida* were unsuccessful.

In view of the massive hemorrhages, the actual lacerations of the liver lobes, the subcutaneous and muscular "bruises," and the multiple internal injuries and broken ribs, a diagnosis of "impact injuries" was made.

Subsequent investigation revealed that during the previous two evenings there had been a very heavy ground fog over the campus. During the night immediately preceding the discovery of the dead and injured waterfowl, ducks had been heard flying into campus buildings and crashing into the parking lot. Mercury vapor street lamps had only recently been installed on the campus parking lots and it is believed that the ducks became confused during the heavy fog and attempted to land on the illuminated parking lots.

There have been a number of reports of mass mortalities among migrating flocks of birds at brightly lighted towers (Overing, 1936) and at airport ceilometers (Johnston, 1955; Tanner, 1954; Johnston and Haines, 1957). However, these mass mortalities have usually involved primarily passerine birds, particularly vireos and warblers. Keeler (1970) reported on a kill of passernines which had been attracted to a fenced comfort station area on U.S. Highway 280 by mercury vapor lamps.

This case at St. Marys College seems worthy of note because diving ducks made up the bulk of the recorded losses.

Acknowledgments - The tests for DVE were conducted by Dr. John A. Newman, Department of Veterinary Science, University of Maryland, College Park.

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A PRELIMINARY ANALYSIS OF THE FEEDING HABITS OF BARN OWLS AT IRISH GROVE SANCTUARY

David S. Lee, Arnold Norden, and Barbara Rothgaber

Several authors (Wallace, 1948; Craighead and Craighead, 1956; Cunningham, 1960; Trost and Hatchison, 1963) have analyzed the pellets regurgitated by the Barn Owl, *Tyto alba*. Examination of the remains of animals contained in these pellets provides an accurate record of the type and number of food items consumed.

Between March and November of 1971 we made several collections of owl pellets from the barn at Irish Grove Sanctuary in Somerset County, Maryland. On these visits all pellets were collected and counted. Later they were picked apart and their contents identified and tabulated. The counting of individual food items was based on the presence of cranial elements (i.e., each skull was counted as one food item).

Most of the pellets examined were collected on March 5 and 27. On March 25 one egg was observed in the nesting box; we found two on the 27th. By April 2 there were 4, and by the 8th the full clutch of 7 eggs was counted. After this date the collection of additional pellets was postponed to avoid disturbing the nesting owls during the incubation and rearing of their young. The food items found in the March series are presented in Table 1.

Our next collection on November 7 yielded very few fresh pellets, perhaps indicating that the owls had not been using the barn as a regular roosting site during late summer and fall. Farther south we have noted that *Tyto* prefers to roost in small, densely foliated cedars, *Juniperus virginiana*, during the fall and winter months. Possibly the Irish Grove owls do the same. The small November series of 20 pellets contained 15 *Microtus*, 3 *Peromyscus*, 1 *Rattus*, and six birds (1 Yellow-shafted Flicker, 5 unidentified). Analysis of an additional collection on display at the sanctuary (date not recorded) revealed 1 additional species, *Mus musculus*.

The data strongly imply that these owls do much of their late winter and early spring hunting in the neighboring *Spartina* (salt marsh grasses) marsh. Although adequate data are still lacking, we would strongly suspect that these owls make a seasonal shift in foraging areas. The November collection strongly indicated the owls were feeding in fields. *Microtus* is abundant in both habitats and therefore not as useful in determining feeding areas as the other species.

For comparison, 124 Barn Owl pellets were collected in March from two barns near Dover in Kent County, Delaware. A November collection yielded no additional pellets at this site. Cornfields and small, scattered woodlots surround the barns for miles in every direction. Although voles also made up the majority of food items for the birds in this area (see Table 2), the difference shows up in the other species

in the diet. The marsh dwelling forms are replaced by species more frequently associated with fields and edificial environments.

Larvae of the old world moth *Trichophaga tapetumella* were found in many of the pellets. They were much more numerous in the November series.

During the next few nesting seasons we hope to continue gathering data on these two populations to evaluate both seasonal and annual shifts in food availability. In addition we would like to make detailed studies of other Maryland owls and their foraging areas so as to determine possible food preferences of individuals as well as to correlate each species with certain habitats. The cooperation of M.O.S. members in locating resident owls would be greatly appreciated.

Table 1. Contents of 75 pellets regurgitated by Barn Owls at Irish Grove Wildlife Sanctuary, Somerset County, Maryland.

	Total Individuals	% Frequency
<i>Microtus pennsylvanicus</i> , Meadow vole	143	66.5
<i>Oryzomys palustris</i> , Rice rat	32	14.8
<i>Cryptotis parvus</i> , Least short-tailed shrew	19	8.8
Birds (14 Red-winged Blackbirds, 1 Virginia Rail, 6 unidentified)	21	9.7
Total	215	99.8

Table 2. Contents of 124 pellets regurgitated by Barn Owls at a site near Dover, Kent County, Delaware.

	Total Individuals	% Frequency
<i>Microtus pennsylvanicus</i> , Meadow vole	181	90.5
<i>Blarina brevicauda</i> , Short-tailed shrew	6	3.0
<i>Peromyscus leucopus</i> , White-footed mouse	4	2.0
<i>Rattus rattus</i> , Black rat	3	1.5
<i>Mus musculus</i> , House mouse	2	1.0
<i>Scalopus aquaticus</i> , Eastern mole	1	.5
<i>Sylvilagus floridanus</i> , Eastern cottontail	1	.5
Unidentified birds	2	1.0
Total	200	100.0

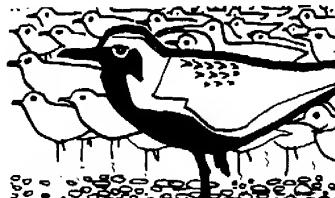
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THE SEASON

OCTOBER, NOVEMBER, DECEMBER, 1971

Chandler S. Robbins

Extraordinary weather conditions set the stage for exciting birding throughout the late fall and winter months. Temperatures, which had averaged 3° above normal in September, were between 5° and 6° above normal in almost all sections of the State during October. Especially remarkable were the average minimum temperatures, which were kept far above normal by the excessive cloudiness that characterized this October. At Friendship Airport, the average minimum temperature for October (55.6°) was higher than the normal mean temperature for the whole month. At Salisbury and Annapolis, it was the warmest October on record; and at the Baltimore City Office of the Weather Service, it was the third warmest October in 100 years. The departure from normal temperature was even greater in the last half of the month than in the first (Oct. 19 through Nov. 2 was the warmest such period ever recorded at the Baltimore City Office), so conditions remained favorable for insectivorous birds much later than usual. The only freezing temperatures recorded in the State in October were in Garrett County on the 8th (minimum 30°). Coupled with the excessive cloudiness was record-breaking rainfall: the most ever for Chestertown, Salisbury and the Baltimore City Office.

By way of contrast, November was close to average, meteorologically, except for the famous Thanksgiving snowstorm that brought essentially the only snow of the 3-month period--and that primarily to a narrow belt in western Frederick and eastern Washington Counties, where most stations reported record one-day accumulations (maximum, 26.5 inches at Catoctin Mountain Park).

The December issue of *Climatological Data* characterized that month in Maryland as "extremely mild with mostly light precipitation and little or no measurable snowfall." It was the warmest December ever at Annapolis, Cambridge and Salisbury, and the second warmest at the Baltimore City Office. On 18 days the average temperature at Baltimore was at least 10° above normal, and on Dec. 16 the mercury entered the 70-78° range at dozens of Maryland stations. December snowfall was one-tenth inch or less in all Divisions except the Appalachian Mountain (0.3 inch) and the Allegheny Plateau (3.0 inches). Such skimpy snowfall is almost unheard of in Maryland's mountain counties, and had much to do with the large number of half-hardy avian stragglers that remained through the period.

Although perhaps of no direct ornithological interest, the State's annual precipitation record was broken at Towson, where 76.52 inches were measured in 1971. The previous soggiest city was Salisbury, where 72.52 inches fell in 1948.

Cold fronts, which are so important in stimulating southward migration in fall, were virtually non-existent in October. A front on Oct. 10 was followed by such extensive precipitation that its effect on migration was minimal, and a weak front on the 12th left nothing but southerly winds in its wake. No other cold fronts arrived until those of Nov. 7, 13, 19, and Dec. 11. Five others passed over the Free State in the last half of December--a bit late for normal migration.

The earliest arrival dates for those species that reach Maryland in October, November and December are summarized by counties in Table 1; and the latest departure dates are listed in Table 2. The 10-year median departure dates for the period 1961-1970, in the first column, can be compared with the 1971 median in the second column for an indication of how the present season compares with that non-entity called an "average" year.

Table 1. Fall Arrival Dates for Late Arriving Species, 1971

Species	Garr	Alle	Wash	Fred	Balt	Howd	Pr.G	Anne	Calv	Kent	Caro	Talb	Dorc	Somr
Whistling Swan	0	0	0	0	11/ 2	11/ 3	11/ 6	10/31	11/ 6	11/ 2	11/ 3	11/ 3	11/ 7	--
Pintail	0	--	--	--	--	--	11/14	--	--	9/18	--	10/16	10/ 1	10/ 3
Green-winged Teal	0	--	0	0	--	--	--	--	--	9/ 1	9/21	--	10/ 1	10/15
Am. Widgeon	11/29	11/18	0	0	--	--	--	11/ 6	--	--	10/12	11/ 7	10/ 1	10/16
Shoveler	0	9/16	0	0	0	0	--	--	--	10/16	0	--	11/ 7	10/17
Redhead	11/29	11/ 2	0	0	--	0	--	11/12	0	9/23	0	11/ 6	11/ 7	--
Ring-necked Duck	11/29	0	10/30	--	11/18	12/30	--	--	--	11/13	10/13	12/19	--	--
Canvasback	11/29	0	0	0	--	12/29	--	11/ 6	--	10/27	0	10/16	--	--
Bufflehead	11/ 5	11/ 2	11/ 7	11/ 3	10/30	0	11/14	11/12	0	9/ 8	11/ 9	11/ 6	--	10/31
Oldsquaw	11/29	11/ 2	0	0	11/ 1	0	0	11/ 6	0	11/ 1	0	11/ 6	11/21	--
Ruddy Duck	11/ 5	10/ 9	0	0	10/ 7	0	--	11/ 6	10/ 3	9/26	11/ 6	12/19	--	10/31
Rough-legged Hawk	0	11/30	10/30	--	--	11/ 9	0	0	0	10/ 7	12/26	12/12	--	--
Am. Coot	11/ 7	10/ 4	--	11/12	10/30	--	--	11/ 6	10/ 1	11/ 1	11/10	11/ 7	11/13	10/31
Saw-whet Owl	--	0	11/22	0	0	0	11/13	0	0	10/29	0	12/19	0	0
Hermit Thrush	--	10/19	--	10/23	10/15	--	10/13	10/14	10/17	10/ 3	10/25	--	--	10/16
Eastern Bluebird	9/26	--	11/13	--	11/10	10/20	10/ 6	--	10/16	11/ 6	--	11/ 6	--	10/ 4
Rusty Blackbird	11/22	10/ 4	--	--	--	11/23	10/ 7	--	10/19	12/19	--	12/19	--	10/15
Evening Grosbeak	11/ 5	11/18	--	--	11/23	11/17	11/14	12/28	--	11/13	11/23	12/18	--	12/ 4
House Finch	0	0	--	11/ 8	--	12/ 5	10/11	10/18	0	12/26	1/ 1	12/12	0	10/ 7
Pine Siskin	11/23	--	--	--	11/25	--	10/27	--	--	12/ 8	11/10	11/ 6	--	--
Tree Sparrow	11/23	11/15	--	--	11/28	--	--	11/13	11/ 7	0	--	12/19	0	0
White-crowned Sparrow	11/11	10/18	10/ 8	--	--	10/18	10/30	0	0	11/13	--	10/17	0	10/17
Fox Sparrow	11/13	11/ 2	--	--	11/ 7	12/ 1	11/ 6	11/17	11/13	10/27	11/19	11/ 6	11/ 7	10/30

From among the many dozens of people who kindly supplied arrival and departure dates for this table, I must single out for special acknowledgment those observers and compilers who contributed the largest number of dates for each county. In addition to those persons named, I wish to thank the many other people without whose observations these tables could not have been constructed. The counties, arranged from northwest to southeast, are abbreviated as shown by the underscoring: Garrett--Frances Pope; Allegany--James Paulus, Kendrick Hodgdon; Washington--Daniel Boone, Alice Mallonee; Frederick--John Richards, Richard Rowlett; Baltimore City and County--Mr. and Mrs. Walter Bohanan, Alice Kaestner, Gladys Cole, Haven Kolb, Nancy Rowe; Howard--Dorothy

Rauth, Rosamond Munro, Jo Solem; Montgomery--Paul Woodward, Robert Pyle, Fred Evenden, Richard Rowlett, Mr. and Mrs. Morrill Donnald, Donald Messersmith; Prince Georges--Kathy Klimkiewicz, David Holmes, Danny Bystrak, John Fales, Lawrence Murphy; Anne Arundel--Danny Bystrak, Rena Bishop, Prof. and Mrs. David Howard; Calvert--John Fales, Chandler Robbins; Kent--Mr. and Mrs. Edward Mendenhall, Margery Plymire, Mrs. A. J. Delario, Roy Ruhnka, Jamie Newlin, G. L. Gardner; Caroline--Mr. and Mrs. A. J. Fletcher, Alicia Knotts, Ethel Engle, Marvin Hewitt, Edwin Unger; Talbot--Jan Reese; Dorchester--Harry Armistead, Charles Hills; and Somerset--Gladys Cole, Harry Armistead, Margaret Donnald, Frances Pope, Mr. and Mrs. Kenneth Irey.

The Christmas Bird Counts. Each of the Maryland Christmas Counts had unusual southern stragglers, new species and/or remarkably high counts of several species. To avoid duplication, the reader is referred to David Holmes' Christmas Count summary in this issue and to the April 1972 issue of *American Birds*. Christmas Count comment in the present *Season* report is limited to species not commented upon by Mr. Holmes.

Loons, Cormorants. A Red-throated Loon that was seen at the Denton bridge over the Choptank River, Dec. 16-21, was the first recorded from Caroline, Maryland's only inland Eastern Shore county (Marvin Hewitt, Jerry Fletcher, Carol Scudder). The first 5 Great Cormorants of the season were seen on St. Georges Island, St. Marys County, on the extraordinarily early date of Oct. 3 (Edward Schell). On Nov. 7 the Great Cormorants numbered 14, and with them were 13 Double-crested Cormorants (Dr. R. L. Pyle). The Great Cormorants remained throughout the period.

Egrets and Herons. Warm weather and open water in all Sections of the State resulted in the following late departures for the heron tribe (new late records for each Section are underscored): Green Heron, Oct. 15 in Garrett County (Mrs. William Pope); Little Blue Heron, Oct. 11 in Kent County (Mendenhalls) and Dec. 4 in Somerset County (Bystrak); Cattle Egret, Oct. 8 in Prince Georges County and Nov. 7 at Blackwater Refuge (Harry Armistead and Richard Rowlett); Common Egret, Nov. 2 at Denton (Marvin Hewitt); Snowy Egret, Sept. 8 in Kent County (Mendenhalls), Nov. 6 in Talbot County (Reese) and Nov. 22 at Assateague National Seashore (Rowlett); Louisiana Heron, 1 at Irish Grove Sanctuary, Oct. 17 (Baltimore Chapter trip), and 1 at Ocean City, Oct. 24 (Rowlett); Glossy Ibis, 1 at Deal Island on Oct. 31 (Vaughns and Salisbury Chapter trip), 1 in Kent County, Oct. 16 (Mendenhalls), and 14 on the same day at Irish Grove Sanctuary (Baltimore trip); one of the 14 ibis carried a green band over its aluminum band on the right leg, signifying it had been raised this summer on the Virginia coast (Mitchell Byrd). See the Christmas Count report for records of eight species of herons, plus Glossy Ibis and American Flamingo!

Swans. An Australian Black Swan seen at Blackwater Refuge (north end of Shorters Wharf Road) from Sept. 27 on (Armistead) is clearly an introduced individual and not eligible for inclusion on one's list. The Miles River Mute Swans, on the other hand, are now well established and are spreading; Jan Reese has banded a good percentage of the population, so we may hope to document their expansion into other counties. The peak of the Whistling Swan migration took place on Nov. 6; a single movement

Table 2. Latest Fall Departure Dates, 1971

Species	Median																
	10-yr 1971	Garr	Alle	Wash	Fred	Balt	Howd	Mont	Pr.G	Anne	Calv	Kent	Caro	Talb	Dorc	Somr	
Green Heron	10/ 2	10/12	10/15	10/19	--	--	9/23	--	9/26	10/16	9/30	8/30	12/19	--	10/ 9	--	10/31
Little Blue Heron	--	10/ 7	0	0	0	0	0	0	9/14	8/26	0	10/11	0	0	10/ 7	12/ 4	
Cattle Egret	--	--	0	0	0	0	0	0	10/ 8	0	8/21	0	0	7/25	11/ 7	--	
Common Egret	--	10/ 7	0	0	0	9/12	0	0	0	10/ 8	9/ 2	0	9/23	11/ 2	0	10/ 7	10/30
Snowy Egret	--	--	0	0	0	0	0	0	0	0	0	9/ 8	0	11/ 6	10/ 7	10/31	
Canada Goose	10/27	10/26	--	11/27	--	--	10/26	10/18	10/30	10/27	10/18	10/23	11/20	--	11/20	--	10/17
Blue-winged Teal	--	--	0	10/19	0	0	--	0	9/26	--	--	--	9/ 1	--	--	--	10/16
Wood Duck	--	10/30	--	10/30	--	--	11/11	--	10/28	--	--	9/ 8	--	12/ 2	--	--	--
Broad-winged Hawk	9/30	9/20	9/15	9/15	9/19	--	--	--	9/23	9/21	--	9/13	--	0	9/25	10/ 2	0
Osprey	10/ 5	10/10	--	9/23	--	10/ 7	--	10/ 2	10/12	10/14	--	10/ 7	11/20	11/ 3	10/16	10/ 2	10/16
Semipalmated Plover	--	--	0	10/ 1	0	9/30	0	0	9/15	0	0	0	0	0	8/20	--	--
American Woodcock	--	11/ 2	10/28	11/18	--	--	11/ 2	12/16	--	11/11	10/ 7	10/17	1/ 1	--	11/ 5	--	--
Spotted Sandpiper	--	10/ 1	--	10/ 1	--	9/25	--	--	10/ 9	10/ 9	--	--	9/ 1	--	--	--	--
Solitary Sandpiper	--	--	--	9/21	--	9/30	--	--	9/15	--	--	--	--	--	--	--	9/24
Greater Yellowlegs	--	9/25	0	9/20	0	9/30	0	0	9/18	0	0	0	9/16	9/ 1	10/16	11/ 7	10/31
Lesser Yellowlegs	--	10/18	0	10/18	0	12/ 2	0	0	9/18	0	11/ 6	0	12/19	9/ 1	8/20	--	10/17
Pectoral Sandpiper	--	9/30	0	10/18	0	9/30	0	0	9/17	0	0	0	0	9/ 3	0	--	10/17
Least Sandpiper	--	9/14	0	10/ 1	0	9/ 8	0	0	9/21	0	0	0	0	9/ 2	9/ 7	--	10/31
Semipalmated Sandpiper	--	9/17	0	10/ 1	0	9/ 8	0	0	9/17	0	0	0	0	9/ 3	9/25	0	0
Laughing Gull	--	10/31	0	0	0	0	0	0	9/22	11/ 7	10/23	10/27	0	11/ 7	11/13	10/31	
Common Tern	--	--	0	0	0	0	0	0	10/ 9	--	10/10	12/19	0	9/25	--	--	
Caspian Tern	--	--	0	0	0	0	0	0	10/ 9	10/ 6	10/23	0	0	0	10/10	0	
Yellow-billed Cuckoo	9/30	9/17	--	9/30	--	--	9/15	9/16	--	10/14	9/14	8/22	9/18	--	--	10/ 3	10/14
Common Nighthawk	9/14	9/14	0	9/11	--	9/13	9/17	9/13	10/ 3	10/30	9/15	--	0	9/ 9	9/ 1	10/ 3	0
Chimney Swift	10/ 8	10/12	--	10/ 6	10/ 7	10/14	10/14	10/12	10/12	10/16	10/14	10/13	9/30	10/14	10/13	10/10	--
Ruby-thr. Hummingbird	9/18	9/25	--	10/ 1	--	9/23	10/ 7	9/26	9/25	9/22	9/18	9/25	10/ 2	--	9/18	--	--
Yellow-shafted Flicker	--	10/20	10/ 2	--	12/11	--	12/ 5	10/10	--	10/20	11/ 6	10/31	--	--	10/17	--	10/ 7
Yellow-bellied Sapsucker	--	11/ 2	--	--	11/ 2	--	10/30	11/15	10/24	11/12	11/29	--	--	--	--	--	10/28
Eastern Kingbird	9/ 8	9/15	--	9/10	--	--	--	9/ 9	--	9/30	--	9/12	9/18	--	--	10/ 1	--
Gt. Crested Flycatcher	9/14	9/22	--	9/24	--	--	--	9/20	9/23	9/11	--	--	9/22	--	--	--	--
Eastern Phoebe	10/21	10/18	--	12/18	--	--	11/24	11/ 5	10/ 9	9/13	10/10	10/17	--	10/27	10/16	--	10/19
Acadian Flycatcher	--	9/19	--	9/13	--	--	--	9/23	9/22	9/23	8/22	9/16	9/15	--	--	--	10/ 3
Least Flycatcher	--	9/15	--	--	0	0	--	9/15	9/12	9/ 3	10/ 6	0	9/15	0	--	0	0

Species	Median															
	10-yr 1971	Garr	Alle	Wash	Fred	Balt	Howd	Mont	Pr.G	Anne	Calv	Kent	Caro	Talb	Dorc	Somr
Eastern Wood Pewee	10/ 2 10/ 4	--	10/ 5	10/13	10/ 2	9/19	10/ 6	9/23	10/14	10/ 6	9/19	10/ 9	10/ 3	--	--	9/24
Tree Swallow	10/16 10/ 7	--	9/23	--	10/ 7	10/ 7	--	10/12	--	--	10/ 3	9/28	11/ 4	8/23	11/ 7	10/30
Rough-winged Swallow	-- 9/30	--	--	--	9/30	--	--	10/ 9	--	--	8/11	--	--	8/20	10/10	--
Barn Swallow	9/13 9/20	--	9/28	8/25	10/ 7	--	9/ 9	9/23	9/22	8/31	9/ 2	9/18	10/ 5	8/20	10/ 3	--
Purple Martin	-- 9/ 7	--	9/20	--	--	9/ 7	--	9/ 3	9/17	9/12	9/ 5	--	--	8/13	--	--
Blue Jay	-- 10/27	--	--	--	--	11/19	--	11/25	11/ 6	--	10/16	--	--	10/17	--	10/17
Red-breasted Nuthatch	-- --	0	0	--	0	0	--	12/ 2	10/13	--	--	12/19	--	12/19	--	0
House Wren	10/ 4 10/ 8	--	9/29	9/28	--	10/16	10/ 3	10/ 8	10/25	10/ 1	9/26	12/19	--	10/17	--	10/16
Catbird	10/16 10/18	--	10/30	10/ 3	10/31	10/17	10/19	10/14	11/ 1	10/15	9/27	12/19	--	10/17	--	10/29
Brown Thrasher	10/14 10/26	--	10/21	9/30	12/17	10/16	10/14	10/ 8	10/25	11/14	11/30	12/19	--	12/19	--	10/28
Wood Thrush	10/ 8 10/ 3	--	9/24	--	9/10	10/15	--	10/12	10/ 3	9/30	10/ 9	10/13	--	--	10/ 3	9/29
Hermit Thrush	10/30 10/28	--	10/22	10/24	10/23	11/17	--	11/ 1	11/28	10/27	--	12/ 1	10/25	--	--	10/28
Swainson's Thrush	10/10 10/ 9	0	9/24	0	10/ 2	9/26	10/24	10/13	10/14	0	10/ 9	10/18	10/12	10/ 9	10/ 3	10/16
Gray-cheeked Thrush	10/ 7 10/10	0	10/11	0	0	9/26	--	10/10	10/ 8	0	0	10/19	--	--	10/ 3	10/21
Veery	9/23 9/14	--	--	--	--	9/10	9/ 3	10/11	9/11	0	--	9/28	9/14	--	0	10/13
Blue-gray Gnatcatcher	9/14 9/12	--	9/10	--	--	9/ 7	--	9/ 6	9/12	9/12	12/19	--	10/ 9	--	9/25	
Ruby-crowned Kinglet	11/ 2 11/ 4	12/11	--	10/30	--	11/19	11/17	10/24	11/28	11/ 4	10/31	--	11/ 3	10/17	--	12/12
Cedar Waxwing	-- 11/ 2	10/ 2	11/10	9/25	--	10/ 7	--	--	11/26	11/ 9	9/23	--	11/ 2	11/28	--	--
Loggerhead Shrike	-- 11/ 9	12/ 2	0	0	12/ 2	0	0	11/ 9	11/ 8	0	0	0	--	10/10	--	--
White-eyed Vireo	9/22 9/24	0	0	0	9/ 6	9/15	9/23	10/ 3	10/29	9/23	10/17	9/24	9/23	10/ 9	--	9/26
Yellow-throated Vireo	-- 9/ 8	0	9/10	0	--	--	9/15	--	9/ 6	9/14	9/ 6	--	9/ 6	--	--	--
Solitary Vireo	10/14 10/14	10/ 2	10/21	10/24	10/14	--	10/10	0	0	10/23	0	10/16	10/ 5	0	0	10/ 5
Red-eyed Vireo	10/ 4 10/ 9	--	9/15	--	10/ 9	9/23	10/12	--	10/16	10/21	10/ 3	10/18	10/ 9	10/ 9	10/ 3	10/21
Black-and-white Warbler	10/ 4 10/ 6	--	9/10	10/13	9/ 7	9/29	10/ 5	9/22	10/30	10/ 6	10/17	10/18	10/15	10/17	--	10/ 5
Worm-eating Warbler	--	0	9/ 7	--	9/14	8/30	--	--	--	0	8/30	0	0	0	0	0
Golden-winged Warbler	-- 9/ 1	8/21	--	--	9/ 6	0	8/16	9/ 1	9/ 5	0	0	9/ 1	0	0	0	0
Blue-winged Warbler	--	--	0	--	--	9/ 2	9/11	0	9/ 5	0	0	9/20	0	0	0	0
Tennessee Warbler	10/ 2 --	0	0	0	9/14	0	10/12	0	0	--	10/ 9	10/ 4	0	0	0	0
Nashville Warbler	10/ 5 10/ 9	--	0	10/10	--	--	10/ 7	--	10/ 9	10/ 1	--	10/ 9	9/10	0	0	10/29
Parula Warbler	9/30 10/ 6	--	--	--	9/11	--	9/29	10/ 7	10/ 7	10/ 6	9/18	10/16	--	0	10/ 3	10/19
Yellow Warbler	-- --	--	--	--	9/ 5	--	9/11	--	10/29	--	--	--	--	--	9/22	
Magnolia Warbler	10/ 4 10/ 4	--	9/19	9/19	9/13	10/ 7	10/ 1	3	10/26	10/ 7	10/ 3	10/ 6	--	10/ 9	0	10/ 9
Cape May Warbler	10/ 4 10/21	10/ 9	0	0	--	0	10/ 3	--	10/14	10/28	0	10/21	10/27	--	0	10/21
Black-thr. Blue Warbler	10/ 8 10/ 8	--	9/21	9/19	0	10/ 7	10/ 8	10/10	10/17	10/ 6	10/ 3	10/18	10/15	--	10/ 3	10/ 8

Table 2. Latest Fall Departure Dates, 1971 (concluded)

Species	Median																
	10-yr	1971	Garr	Alle	Wash	Fred	Balt	Howd	Mont	Pr.G	Anne	Calv	Kent	Caro	Talb	Dorc	Somr
Myrtle Warbler	11/ 4	11/18	--	12/18	11/ 1	--	--	11/16	--	11/20	11/28	11/ 6	--	--	--	--	--
Black-thr. Green Warbler	10/ 6	10/ 7	--	10/ 5	10/ 9	10/ 9	10/ 8	10/10	10/ 9	10/ 5	10/ 6	10/ 3	10/ 4	--	0	0	0
Blackburnian Warbler	9/26	9/28	--	9/13	--	--	9/23	10/ 2	0	0	10/ 4	10/ 3	9/15	0	0	0	0
Chestnut-sided Warbler	9/28	9/19	8/21	9/15	--	9/11	9/23	9/11	10/17	0	--	--	10/ 4	0	--	0	10/27
Bay-breasted Warbler	9/30	9/28	0	10/11	0	0	10/ 7	--	9/28	9/27	0	0	9/23	0	0	0	0
Blackpoll Warbler	10/ 8	10/12	0	0	10/ 7	0	0	9/21	10/ 9	10/27	10/17	10/ 3	10/27	10/15	--	10/ 3	10/21
Pine Warbler	--	10/ 4	--	9/30	--	9/ 7	10/ 7	9/11	0	10/ 6	10/ 4	9/19	10/16	9/29	10/ 9	10/ 3	10/12
Prairie Warbler	--	9/18	0	9/15	--	--	9/29	--	8/21	10/17	--	--	--	--	--	--	9/18
Palm Warbler	10/22	10/15	10/27	10/28	0	10/ 9	0	10/10	0	10/20	10/15	0	10/18	10/ 7	9/25	10/ 3	10/27
Ovenbird	10/ 7	10/ 9	--	10/ 8	--	10/ 9	10/15	10/ 3	10/ 9	10/11	9/ 8	9/ 6	10/14	10/ 9	--	--	10/ 7
Northern Waterthrush	10/ 2	10/13	--	9/24	0	0	0	10/ 3	10/17	0	0	10/13	--	--	0	10/30	
Kentucky Warbler	--	--	9/15	--	--	--	9/10	--	9/ 4	--	8/15	--	--	--	--	--	
Connecticut Warbler	9/28	--	0	0	--	0	0	0	10/ 9	0	0	10/ 6	9/23	0	0	0	10/11
Yellowthroat	10/14	10/10	10/ 2	10/19	10/11	9/13	10/19	10/ 3	--	10/27	9/26	9/ 7	12/ 8	--	10/17	10/10	10/30
Yellow-breasted Chat	10/ 9	10/10	--	10/ 3	--	--	12/27	9/25	10/ 4	10/17	10/14	--	10/28	--	--	--	10/ 5
Hooded Warbler	--	--	--	9/ 4	--	--	9/11	--	9/11	--	9/ 1	0	0	0	0	0	0
Canada Warbler	9/18	9/24	--	9/ 8	--	9/ 6	9/ 1	9/23	10/10	9/24	10/14	0	9/28	0	--	0	0
American Redstart	9/30	10/ 4	--	9/24	--	9/21	10/ 7	9/24	9/23	10/ 4	10/ 6	10/ 3	10/12	10/11	9/25	--	10/19
Bobolink	--	--	--	0	0	0	0	--	0	--	9/ 6	9/18	9/11	--	--	0	--
Orchard Oriole	--	7/28	0	--	--	--	7/17	--	9/ 5	7/28	7/14	9/ 1	--	--	--	--	--
Baltimore Oriole	9/22	9/18	--	10/31	--	--	9/13	--	10/30	9/19	11/13	9/15	9/16	0	0	0	9/15
Scarlet Tanager	10/ 4	10/ 6	--	10/ 5	--	9/23	10/16	10/ 3	10/16	10/ 6	10/ 7	10/ 9	10/13	9/22	--	--	--
Summer Tanager	--	9/22	0	0	0	0	10/11	0	9/12	9/25	10/ 7	--	8/29	9/18	--	--	--
Rose-breasted Grosbeak	9/30	9/23	--	9/13	9/26	9/21	9/23	10/20	9/23	9/29	9/23	11/13	--	9/ 7	--	10/ 3	9/16
Blue Grosbeak	--	10/ 2	0	0	0	0	0	0	--	9/11	9/29	--	10/17	10/ 2	10/27		
Indigo Bunting	10/ 6	10/11	--	9/30	--	--	10/14	10/15	10/12	--	9/12	10/ 9	--	10/10	--	10/13	
Rufous-sided Towhee	10/29	11/ 9	--	--	10/ 2	11/11	12/21	11/29	10/24	11/27	--	11/ 7	12/19	--	10/17	--	10/28
Savannah Sparrow	--	11/ 9	--	10/16	--	11/11	--	--	11/12	11/28	11/ 7	--	--	--	--	--	10/31
Chipping Sparrow	10/26	11/ 6	10/24	11/ 4	10/23	10/ 6	10/28	12/10	--	11/28	11/25	10/16	12/19	11/ 9	10/17	11/ 7	12/12
Fox Sparrow	11/24	12/ 7	12/ 3	11/11	--	12/11	11/25	12/18	--	12/11	--	--	--	--	--	--	--
Lincoln's Sparrow	--	--	0	0	0	0	0	0	0	11/28	0	0	0	0	10/ 9	0	10/28
Swamp Sparrow	--	--	--	10/28	--	--	10/27	--	--	--	--	--	--	10/17	--	10/29	

of 6,000 birds (where only 30 were seen the day before) created a spectacular scene in Talbot County (Reese). Once again, Whistling Swans took to the fields in large numbers in Kent, Queen Annes, Talbot and Dorchester Counties, causing much consternation among hunters, who preferred that ducks and geese would be attracted to the available grain.

Geese. Richard Rowlett reported a fantastic count of 245,800 Canada Geese on Nov. 20 in the 20-mile stretch from Eastern Neck National Wildlife Refuge to St. Michaels. A single individual of the small Hutchins race was at Bellevue on Nov. 6 (Mr. and Mrs. Harry Armistead). The Brant population, both in the Chesapeake and on the coast, was so small as to cause much concern among birders; even by Christmas time only token numbers (2,000) could be found in the Ocean City circle. Surveys by the U.S. Bureau of Sport Fisheries and Wildlife recorded only 2 to 3 percent young birds in the population. An adult White-fronted Goose was seen in Kent County: near Chestertown (photographed) on Nov. 13 (Rowlett and Paul DuMont) and at Remington Farms on Nov. 20 (Rowlett and Jim Berry). Arrival dates for Snow Geese were: Sept. 25 at Blackwater Refuge (William Julian), Oct. 27 at Tanyard (Ethel Engle), and Oct. 30 in Talbot County (Reese).

Ducks. The following ducks were still present on Deep Creek Lake, Garrett County, on Dec. 20: Mallard, Black Duck, Canvasback, Lesser Scaup, Common Goldeneye, Bufflehead, Ruddy, Hooded Merganser and Common Merganser (Christmas Count). Garrett County departure dates for other species were Dec. 11 for Gadwall and Red-breasted Merganser (Rowlett), and Nov. 29 for American Widgeon, Redhead, Ring-necked Duck, and Oldsquaw (Mrs. William Pope). The only European Widgeon reported was seen on Kent Island on Nov. 12 (John Poteet and Baltimore Chapter). Oldsquaws, which are rare in Maryland away from tidewater, were seen not only in Garrett County, but also near Old Town on Nov. 2 (first Allegany County record--James Paulus), Loch Raven Reservoir (29 on Nov. 1--Douglas Hackman), and Druid Lake in Baltimore (in October by Peggy Bohanan). Arrival dates for eiders at Ocean City inlet were Nov. 6 for the King (Robert Warfield) and Nov. 14 for the Common (Rowlett and Paul DuMont). The Common Eider remained to at least Nov. 25, and Kings were present through the rest of the period. Surf Scoters were more common than usual throughout the tidewater area of Talbot County, where they were seen regularly from Oct. 16 on (Reese).

Hawks and Eagles. Three Goshawks were reported, two of them on the same day by Richard Rowlett: an immature at Hughes Hollow (Seneca) and an adult at Lilypons on Oct. 20. The third bird was seen being attacked by crows at Greenbelt on Nov. 30 (Charles Hills). Bald Eagles were noted only in these tidewater counties: Anne Arundel, Kent, Caroline, Talbot, Dorchester, Wicomico, Somerset and Worcester, with the great majority of the sightings made at Blackwater Refuge. The Blackwater Golden Eagle was first seen on Nov. 13 (Taylor McLean and Baltimore Chapter). In the December issue we mentioned that the peak flight of Broad-winged Hawks went through Maryland during the period Sept. 21-24; a late report that dwarfs all the earlier ones for this fall was of an estimated 3,000 birds over Gaithersburg on Sept. 22 by Wayne Sieck. An early Rough-legged Hawk

was found on Nov. 9 at Highland (Mrs. Harry Rauth). Peregrine Falcons were seen at Hughes Hollow, Poplar Island, Blackwater Refuge, Ocean City and Assateague National Seashore.

Gallinules. Richard Rowlett found single late Common Gallinules at Blackwater Refuge on Nov. 22 and in the Ocean City area on Dec. 5.

Sandpipers. There were several late shorebird records, doubtless a result of the exceedingly mild autumn. American Woodcock were present in Howard County throughout December (Aelred Geis, Mrs. G. Colin Munro), and 54 individuals were tallied on the Maryland Christmas Counts (new highs at Triadelphia, Seneca, Southern Dorchester County and Ocean City). Other late occurrences were: Dunlin at Old Town in Allegany County on Oct. 30 (Paulus), Willet at West Ocean City on Nov. 27 (Richard Kleen and Tom Cohee) and again on the Dec. 29 Christmas Count, Lesser Yellowlegs in Kent County on Dec. 19, 4 Stilt Sandpipers and a Long-billed Dowitcher at Irish Grove Sanctuary on Oct. 17 (Charles Vaughn, Robbins, and Baltimore Chapter). A single Purple Sandpiper at Ocean City inlet on Oct. 24 broke the State arrival record by four days (Rowlett).

Jaegers. The bird of the year at Irish Grove Sanctuary on Pocomoke Sound was an adult Pomarine Jaeger that was blown in by Hurricane Ginger and flew over the Sanctuary headquarters early on the morning of Oct. 2 (Robbins); the bird called once as it flew low overhead--the first time I have heard this usually silent species call except on its breeding ground. Single Parasitic Jaegers were seen from Assateague Island on Oct. 4 (Robbins and Scott Ward) and Oct. 24 (Rowlett), and Rowlett and Paul DuMont found another 7 miles off Ocean City on the late date of Nov. 14.

Gulls. The Chestertown Glaucous Gull returned on Dec. 6 to the Queen Annes County side of the Choptank River, just upstream from the Route 213 bridge. A Great Black-backed Gull at Eagle Harbor on the Patuxent River on Oct. 9 was an early arrival for Prince Georges County (Lawrence Murphy), and a Ring-billed Gull at Deep Creek Lake on Dec. 12 was late for the Allegheny Plateau (Rowlett). A very early Black-legged Kittiwake was among hundreds of gulls and terns feeding at Ocean City inlet at sunset on Nov. 22 during an extraordinarily low tide caused by 30 m.p.h. westerly winds. An immature Little Gull on Dec. 29 was a new species for the Ocean City Christmas Count.

Terns. Royal Terns were encountered as late as Sept. 22 in Kent County (Mendinhalles), Nov. 6 in Talbot County (Reese), and Dec. 29 at Ocean City (Christmas Count). A count of 18 Caspian Terns in southern Dorchester County on Oct. 1 was the best concentration found in Chesapeake Bay (Armistead).

Owls. Very few Saw-whet Owls were reported: Oct. 29 in Kent County (Mendinhalles), Nov. 12 (banded) and Nov. 27 at Chevy Chase (Dr. Robert Pyle), Nov. 13 (banded) at Piscataway Park (Kathy Klimkiewicz), Nov. 22 at Fairplay, Washington County (Alice Mallonee), and Dec. 19 at Bellevue (Armistead). Short-eared Owl arrivals were detected on Nov. 21 at

Poolesville High School (Paul Woodward) and on Nov. 25 at Assateague Island (Rowlett).

Goatsuckers. A Chuck-will's widow was flushed six times (from as close as ten feet) at South Point during the Dec. 29 Ocean City Christmas Count by David Holmes, whose detailed description adds this species to the list of casual winter records for the State. A Common Nighthawk banded at Piscataway Park on Oct. 30 was two weeks later than the extreme fall departure date for Maryland (Kathy Klimkiewicz).

Western Kingbird. A fast-moving cold front out of the west disintegrated over Maryland when it ran into a stagnated low pressure area on Oct. 24. At dawn, heavy rain and northeasterly winds covered all of Maryland except the southern counties and the lower Eastern Shore. But right along the boundary of the remnants of the front, Richard Rowlett discovered an unprecedented concentration of Western Kingbirds: 4 birds in one tree 2 miles southwest of Ocean City, and 5 more on power lines just across the Delaware line at Fenwick Island. Others, all by the same observer, were found as follows: 1 at Ocean City on Oct. 30, singles at Hoopers Island on Nov. 7 and Blackwater Refuge on Nov. 22, and 1 at Kent Island, also on Nov. 22.

Nuthatches, Wrens. Gude's Nursery in Rockville was the only place in Maryland where Red-breasted Nuthatches were found wintering in any numbers; Rowlett counted 12 there on Dec. 2. Paul Woodward banded a Bewick's Wren at Hughes Hollow, Montgomery County, on Oct. 15; another arrived at the Kendrick Hodgdon's feeder at LaVale, Allegany County, on Nov. 28.

Thrashers, Thrushes. Brown Thrashers were more common than usual on the Coastal Plain into the Christmas Count period; 124 were seen on the Maryland counts, including singles in Allegany and Washington Counties, and 4 birds in the Seneca circle. There was general agreement that the autumnal thrush migration was a poor one again this year. The only good flight came on Oct. 16, which was a bit late for all but the Hermit. The highest one-day count from a Maryland banding station was 4 Wood Thrushes at Piscataway Park on Aug. 30 and Sept. 11, and 4 at Damsite on Oct. 9; 51 Hermits and 9 Swainson's at Damsite on Oct. 16; 5 Gray-cheeks at Piscataway on Oct. 8; and 6 Veeries at Damsite on Oct. 1.

Kinglets, Pipits. A late Ruby-crowned Kinglet was found at Herrington Manor in Garrett County on Dec. 12 (Rowlett), and 24 Water Pipits were seen above C & O Lock 75 at Old Town on Nov. 27 (Paulus).

Shrikes, Vireos. Late dates for Loggerhead Shrikes in areas where they do not normally winter were Dec. 2 and Dec. 20 in Garrett County (Mrs. Pope), Nov. 9 at Hughes Hollow (Woodward), and Dec. 2 at Lilypons (Rowlett). For late vireo dates, we have a White-eye banded at Piscataway Park on Oct. 29, one day short of a State record (Kathy Klimkiewicz), and Red-eye stragglers on Oct. 21 at Fort Meade (Rena Bishop) and Irish Grove (banded by Mrs. Cole).

Warblers. The lack of the customary frequent cold fronts in October made the warbler migration a disappointment to many observers. The best flights came on Oct. 13, 16, and 27-31. Palm Warblers featured prominently in the October migration at Irish Grove Wildlife Sanctuary, Somerset Co., where a record 76 individuals (65 Western, 11 Yellow) were banded on Oct. 13 and 44 others the next day (Mrs. Cole). Four Palms at Cranesville Bog on Oct. 27 were late for Garrett County (Rowlett). Yellow-breasted Chats lingered into October or later in seven counties, and December birds were seen in Baltimore (Edith Conley, Mac Plant and Douglas Frost, Mrs. William Feilinger) and in Kent County (3 birds on Christmas Count, Dec. 19). Yellowthroats were seen on 8 of Maryland's 19 Christmas Counts, and Ocean City had an all-time high count of 16 individuals. Late stragglers in the warbler family were: Black-and-white banded at Piscataway Park on Oct. 30 (record for Western Shore Section, Kathy Klimkiewicz), Prothonotary recaptured at Piscataway Park on Oct. 4 (State record, Danny Bystrak), Nashville banded at Irish Grove on Oct. 29 (Mrs. Cole), Yellow banded at Piscataway Park on Oct. 29 (State record, Kathy Klimkiewicz), Magnolia repeated at Piscataway on Oct. 26 (1 day short of State record, Danny Bystrak), Cape May in Caroline County on Oct. 27 (V. Edwin Unger) and in Annapolis on Oct. 28 (Sectional record, Prof. & Mrs. David Howard), Chestnut-sided banded at Irish Grove on Oct. 27 (State record, Mrs. R. D. Cole), Prairie at Fort Meade on Oct. 17 (Rena Bishop), Northern Waterthrush at Irish Grove Sanctuary on Oct. 30 (State record, Mrs. Cole), Kentucky at Old Town on Sept. 15 (Sectional record, James Paulus), Wilson's at Fort Meade on Nov. 23 (Sectional record, Morgan Jones), and Canada at Fort Meade on Oct. 14 (Sectional record, Rena Bishop). This is a most impressive list of records approaching or breaking departure records in a single season.

Orioles, Tanagers. Baltimore Orioles are now wintering so regularly in the Coastal Plain and Piedmont of Maryland that late records from these Sections can no longer be considered departure dates; thus an Oct. 31 sighting at LaVale in Allegany County (Hodgdon) qualifies as the latest fall departure date, even though a much later bird was seen in Calvert County on Nov. 28 (Fales). Dr. Pyle banded an unusual seasonal total of 14 Scarlet Tanagers at Chevy Chase, Sept. 15 to Oct. 16, equaling the Piscataway total compiled entirely from Aug. 14 to Sept. 19. At Damsite, 24 were banded from Aug. 30 to Oct. 13. Each station had its peak on a different day. There were none at Irish Grove this fall. Strangely, the latest date for a Summer Tanager came from Baltimore City, Oct. 11 (Bohanans).

Winter Finches. Only a scattering of Pine Siskins and Evening Grosbeaks arrived prior to mid-November, and the main concentrations did not get here until after Christmas. Apparently most of the people who have House Finches are not bothering to report their presence, and we are hard pressed to report significant arrival dates. In most parts of Maryland House Finches do not yet breed, so fall arrival and spring departure dates are greatly desired right now; a few years hence may be too late because by that time great swarms of this species may remain with us throughout the year. The earliest House Finch dates received were Oct. 7 at Irish Grove Sanctuary (Mrs. Cole, Debings and Vaughns),

Oct. 11 at Greenbelt (Charles Hills), Oct. 18 at Annapolis (Prof. and Mrs. David Howard), and Nov. 8 in Frederick County (Dr. Phyllida Willis). The only Red Crossbills of the period were single birds at Swallow Falls State Park, Oct. 27, and Deep Creek Lake, Dec. 11 (Rowlett).

Other Finches and Sparrows. Late Blue Grosbeaks were discovered near Easton on Oct. 17 (Bob Price), at Assateague State Park and National Seashore on Oct. 24 (Rowlett), and (banded) at Irish Grove Sanctuary on Oct. 27, one day short of the State record (Mrs. Cole). A Rose-breasted Grosbeak at the Fales' feeder at Plum Point on Nov. 13 was extraordinarily late. A late Dickcissel was still on the breeding grounds along New Design Road in Frederick County on Sept. 25 (Dr. Fred Evenden); another appeared at the Fales' feeder on Nov. 14 and 17. An undetermined number of Dickcissels (about 4 birds) were living off feeders in Rock Hall in late December (Christmas Count). A Henslow's Sparrow banded at Irish Grove on the day of the Oct. 16 Baltimore Chapter trip was a treat for the participants.

Snow Buntings. These winter residents arrived at Sandy Point State Park on Nov. 13 (5 birds, Lansing and Peggy Fulford) and at Ocean City on Nov. 25 (90 birds, Richard Rowlett). They were missed in both these areas on the Christmas Count, but 3 were seen in Kent County on Dec. 19 (observer not stated), and 1 in Garrett County on Dec. 20 (first county record, David Holmes).

U.S. Bureau of Sport Fisheries and Wildlife
Migratory Bird Populations Station, Laurel

WATCH FOR COLOR-MARKED BIRDS

You can contribute valuable information on bird distribution and migration by watching for birds that have been marked in various ways for recognition of specific populations. We cannot hope to keep you informed on all the authorized color-marking projects in the East, but we shall call attention, from time to time, to those marked birds most likely to be encountered by Maryland field observers.

If you see color-marked birds other than those listed here, report species, type and color of marking, date and locality to the Bird Banding Laboratory, Laurel, Md. Observations of the following birds should be reported directly to the investigators, who will supply the banding data.

Whistling Swans with neck collars. Each bird has a different number on its collar. Read number with telescope and report letter and number and color of neck collar to Dr. W.J.L. Sladen, 615 N. Wolfe St., Baltimore, Md. 21205.

Shorebirds with dyed underparts and/or numbered plastic streamers. Report even if number cannot be read, to Dr. Raymond McNeil, Dept. of Biological Sciences, Univ. of Montreal, C. P. 6128, Montreal, 101, Quebec.

Ring-billed Gulls with 1 1/2-inch round Saflag wing tags. Report color of wing tag to Prof. William Southern, Northern Ill. Univ., Dekalb, Ill.

Common Terns with plastic leg band. Report color and position of color band to Miss Helen Hays, Am. Museum of Natural History, N.Y. 10024

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